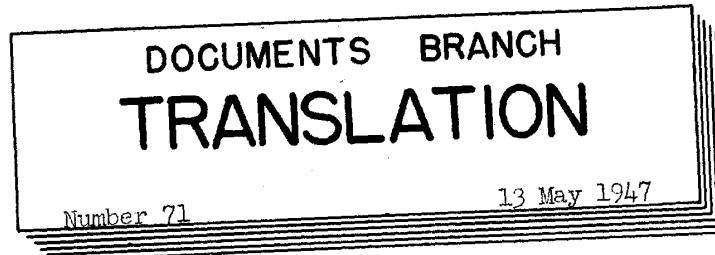


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Number 71

13 May 1947

SAKHALIN MONTHLY WEATHER REPORTS
JULY AND AUGUST 1939

Prepared by
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S U M M A R Y O F C O N T E N T S

Sakhalin Monthly Weather Reports, July and August 1939
(DB No 303517)

This a complete translation of weather reports on Sakhalin for the months of July and August 1939, compiled by the Sakhalin Government Observatory. They are published in July 1940 and August 1940 respectively.

The reports include a summary of meteorological conditions during the month, charts showing the rainfall and average temperature, tables on biological phenomena, occurrence and location of thunderstorms, insolation, and earthquakes, weather summary tables, weather tables, and local weather summary tables.

Each report is classified "Secret" by the Japanese.

Pages 1 through 98

EDITOR'S NOTE: An asterisk following a name or place name in capitals indicates a transliteration from Japanese.

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COMPLETE TRANSLATION

Doc No 303517

SAKHALIN MONTHLY WEATHER REPORTS
JULY AND AUGUST 1939

Sakhalin Government Observatory
July and August 1940

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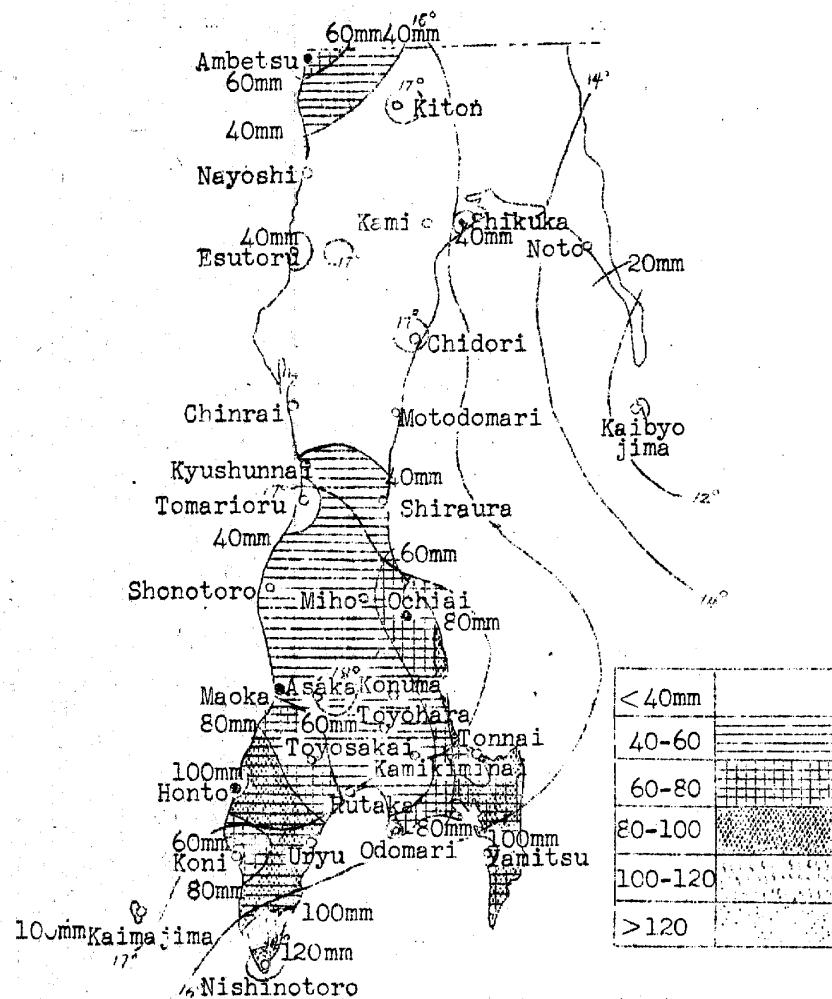
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Part 2. AUGUST WEATHER REPORT

Weather Summary
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WEATHER SUMMARY

There were frequent low pressures from the beginning of the month, and occasional high pressures entered locally, offering some protection. On the other hand high pressures developed in the Okhotsk Sea and the weather was gloomy for the most part. When the weather changed, the number of days of good weather decreased and there were more cloudy days. The number of sunny days in the north and at Ochiai increased, but decreased in other sections. There were light winds along the southern section of the western coast, which is unusual for this area, but in other areas the wind was stronger than usual and more stormy days were observed, especially at Shikuka. Except for local extremes, there were above-normal temperatures, particularly in the middle of the month. Prevailing southerly winds were numerous. The average temperature was generally rather low and the rainfall increased generally; there was a decrease in some sections.

Pressure: Average pressures were between 757.1 mm at Ochiai and 756.3 mm at Ambetsu (normal year for Ambetsu). This was an increase of .1 mm for Ochiai and .2 mm for the section to the south. Shikuka showed a .5 mm decrease. Maximum high developed in the Okhotsk Sea, 766.1 mm at Shikuka around midnight of the 5th. Minimum low was in the Mamiya Straits, with a low at Ambetsu of 742.7 mm on the morning of the 16th.

Wind: The prevailing winds were easterly at Honto, southly at Ochiai and south-southwest in other sections. Compared with the average wind velocities which are between 4.1 m at Odomari and 2.4 m at Ambetsu, the average along the western coast in the south was under 0.4 m. Other places showed an increase ranging from 0.2 m at Ambetsu to 0.9 m at Shikuka. Greatest velocity was reached when the low pressures crossed over from Northern Sakhalin in the early morning of the 19th, and the wind was south-southwest at 16.5 m.

Temperature: Averages were between 17.1° at Honto and 14.5° at Shikuka. Temperatures were generally higher than normal with increases of 0.8° at Odomari and 1.5° at Ochiai. Early in the month Shikuka showed a decrease of 0.2°, the southern section of the west coast 1.2°, and other places showed increases up to 0.4°. In mid-July, increases ranged from 1.6° at Honto to 3.9° at Ochiai. In the latter part of July there was a 0.1° increase from Honto to Macka, a 0.6° increase at Ochiai, and a general increase throughout the island. There was a maximum high of 33.7° at Toyohara on the 16th followed by 33.5° at Shiraura on the same day, minimum low of 2.8° was at Shikuka on the 9th followed by 3.3° at Noto on the 7th.

Insolation: Insolation duration was between 214.8 hours at Ochiai (45%) and 121.3 hours at Honto (25%). There was an increase over normal of 41.2 hours at Ochiai (9%), 45.3 hours at Shikuka (9%) and 18 hours at Ambetsu (3%). There were decreases of 4.9 hours at Odomari (1%), 34.7 hours at Honto (8%),

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and 20.1 hours at Maoka (4%). In the early part of the month a decrease of 3 to 10 hours was observed along the western coast, an increase of 8 hours at Odomari and Ochiai, and about 15 hours at Shikuka. In mid-July there was a general increase throughout the island ranging from 7 hours at Odomari to 34 hours at Ochiai. In late July there was a general decrease of 35 hours along the southern section of the western coast, about 15 hours at Odomari, and 1 hour at Ochiai. In the northern section, however, there was an 11-hour increase.

Humidity: Averages ranged between 89% at Esutoru and Shikuka, and 83% at Honto and Ambetsu. Decreases of 3% from normal were observed at Odomari and Ambetsu, and an increase of 1% at Shikuka; other sections, however, showed a general decrease. There was a minimum humidity of 39% at Ochiai on the 22nd followed by 42% at Maoka on the 9th.

Precipitation: Range for the month was between 95.5 mm at Honto and 32.3 mm at Shikuka. There was an increase over normal of 7.4 mm at Honto, and a decrease of from 3.0 mm at Ambetsu to 57.8 mm at Shikuka. In early July there was an increase of 11.5 mm at Ambetsu, a decrease of 4.3 mm at Honto and 27.6 mm at Ochiai. In mid-July there was an increase of 8.4 mm at Honto, a decrease of 3.5 mm at Odomari, and 29.4 mm at Shikuka. In late July there was an increase of 3.3 mm at Honto, a decrease of 6 mm at Ambetsu and 18.7 mm at Shikuka. Maximum daily precipitation of 35.7 mm at Honto on the 14th followed by 25.3 mm at Ambetsu on the 21st.

Weather: There were no clear days observed at Odomari and Honto, but 1 day was counted in other sections. A decrease from normal of 2 days was observed at Odomari and Honto and 1 day at Maoka, Ochiai and Shikuka. The number of cloudy days ranged from 24 days at Honto to 15 days at Ochiai. There was a decrease of 3 days at Shikuka, an increase of 1 day at Odomari, and 5 days at Honto and Ambetsu. The number of rainy days ranged from 18 days at Ochiai to 10 days at Odomari. Honto was normal, but there were increases of 2 days at Maoka and Ochiai, while other sections showed a decrease of 2 to 3 days. Stormy days ranged from 6 days at Shikuka to 1 day at Maoka. Honto was normal but there was a decrease of 2 days at Maoka and an increase of 1 day at Ochiai, and 5 days at Shikuka.

Storms: There was only one outstanding low pressure observed. Low Pressure of the 18th-19th: On the morning of the 18th a low developed in the vicinity of Manchuli with a pressure of 752 mm. This low immediately advanced eastward and approached Northern Sakhalin (Qha) on the morning of the 19th with a pressure of 740 mm. By noon it entered the central section of the Okhotsk Sea and by evening it was observed at the western coast of Kamchatka. By the next morning it was recorded in the central part of Kamchatka.

From evening of the 18th the existence of a low was observed along the upper Amur River region. It caused a gradual cloudiness and an increase in southerly winds. By the morning

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of the 19th it was cloudy at Ambetsu, and it appeared that it would rain but the temperature rose, and there was no rain. A maximum wind velocity of about 11 meters occurred prior to 0600 on the 19th and it reached 16.5 meters at Ambetsu. South and southwesterly winds were observed on the same day but they started to subside by evening. Due to this low a maximum velocity of 7.7 meters was observed at Odomari. Around midnight of the same day there was a secondary low of 757 mm in the vicinity of Kaimajima, and this caused an ENE wind of 12.2 meters which was observed at Odomari.

Place	Minimum Low Pressure	Time 1300/19	Maximum Wind Velocity	Direction	Time Date	Rainfall (18th and 19th)
Odomari	751.2 mm	1300/19	12.2 m	ENE	2300/19	----
Honto	751.7	1300/19	11.7	S	0300/19	----
Maoka	750.9	1200/19	10.3	S	0500/19	0
Ochiai	748.9	1000/19	11.8	S	0900/19	----
Esutoru	746.5	0800/19	11.1	SSW	1600/18	2
Shikuka	744.9	0400/19	10.3	SSW	0200/19	0
		0500/19				
		0600/19				
Ambetsu	744.9	0400/19	16.5	SSW	0400/19	2
		0500/19				

BIOLOGICAL PHENOMENA

Following are notations on when certain animals and insects appeared.

	Date	Place	Compared to last year	Compared to average year
First cicada chirpings heard	3 22 23 24	Ambetsu Miho Odomari Maoka Aizaki	12 days early	26 days earlier
Dragon-flies first seen	7 16 18	Shikuka Honto Odomari	13 days early 21 days late	11 days earlier 8 days earlier
First salmon-trout caught	1 4 15	Nishinotoro Gendomari Toyosaka	Same date 8 days late	Same date

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Plant Seasons

Plant	Phase	Date	Place	Compared to last year	Compared to average year
Siberian Iris	Budding	1	Shikuka	1 day early	2 days early
		2	Ochiai	11 days late	5 days late
		2	Motodomari		
		3	Chidari		
		5	Odomari	Same date	
	Full Bloom	5	Nishinotoro	15 days late	
		10	Koni	4 days late	
		10	Noto		
		4	Maoka	16 days early	
		5	Kaimajima		
Thistle	Budding	5	Esutoru		
		8	Shikuka		
		10	Motodomari		
		15	Ochiai		
		15	Nishinotoro		
	Bloom	15	Upper Shikuka		
		16	Odomari		
		20	Noto		
		22	Koni	2 days late	
		5	Kamikiminai		
Golden- banded	Budding	10	Koni	2 days early	
		15	Chidori		
		Mid	Nishinotoro		
		20	Koni	1 day early	
		25	Toyosak		
	Bloom	Late	Nishinotoro		
		1	Ambetsu		
		7	Odomari	2 days late	
		10	Noto		
		15	Odomari		
Lily	Budding	25	Noto		
		10	Chidori		
		25	Noto		
		15	Chidori		
		10	Chidori		
	Full Bloom	5	Koni	2 days late	
		25	Noto		
		15	Chidori		
		10	Chidori		
		5	Koni	2 days late	
Dandelion	Budding	25	Kaimajima		
		3	Chidori		
		10	Noto		
		5	Chidori		
		25	Noto		
	Full Bloom	20	Motodomari		
		3	Chidori		
		10	Noto		
		20	Motodomari		
		3	Chidori		
Lily of the Valley	Budding	10	Noto		
		20	Motodomari		
		3	Chidori		
		10	Noto		
		20	Motodomari		
	Bloom	3	Chidori		
		10	Noto		
		20	Motodomari		
		3	Chidori		
		10	Noto		

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Plant	Phase	Date	Place	Compared to last year	Compared to average year
OBA SENKYU*	Budding	1	Odomari	16 days early	21 days early
YANAGIRAN* (Omagraceae)	Budding	10	Kamishikuka		
EZONYU*	Budding	10	Kamikiminai	35 days late	
GUNNANFURO*	Full Bloom	1	Odomari		
Fukayama Buttercup	Full Bloom	1	Odomari		
Black Lily	Full Bloom	5	Noto		
Jap Lady's Slipper	Full Bloom	6	Noto		
Cornelian Cherry	Full Bloom	6	Odomari	5 days late	7 days late
OBA SENKYU*	Full Bloom	10	Odomari	18 days early	24 days early
		2	Chidori		
		4	Honto		
		5	Odomari	1 day late	Same date
	Budding	15	Tonnai		
		19	Kaimajima		
		20	Nishinotoro		
Rosa Rugosa		23	Koni	3 days late	
		30	Noto		
		8	Chidori		
		12	Odomari	9 days early	5 days early
	Full Bloom	15	Kamishikuka		
		19	Kaimajima		
		25	Tonnai		
	Late		Nishinotoro		
	Budding	3	Chidori		
		10	Ambetsu	1 day late	14 days late
		26	Osaka		
NANAKAMADO*		3	Koni	Same date	
	Full Bloom	5	Odomari	Same date	2 days early
		10	Chidori		
		25	Noto		
	Fresh Ver- ture	1	Ambetsu	Same date	17 days late
		10	Chidori		
	Mid	Koni	Same date		

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Plant	Phase	Date	Place	Compared to last year	Compared to average year
	Budding	2	Noto		
		5	Chidori		
FUREBUSH*	Full	10	Noto		
	Bloom	15	Chidori		
		20	Odomari	1 day early	7 days late
	Budding	1	Chidori		
		5	Kamikiminai	5 days early	
Red- berried Elder	Full	10	Chidori		
	Bloom	15	Kamikiminai	10 days early	
	Fresh	10	Chidori		
	Verdure	Late	Koni	Same date	
Willow	Fresh	1	Chidori		
	Verdure				
Silver Fir	Fresh	10	Chidori		
	Verdure				
Acer pictum, typicum,	Fresh	15	Chidori		
	Verdure				
SANCHIN*	Fresh	4	Odomari	1 day early	3 days early
	Verdure				

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Table 1.

THUNDERSTORMS

Storms were observed in various places during the month as follows:

July 1939

Thunderstorm Observations

Date	Place	Began Time	Ended Time	Direc- tion	Inten- sity	Rain- fall	Notes
				Direct- tion	Progress		
1	Ambetsu	1442	NW	1488 (sic)	NW	NW	Weak 0.5 Thunder only with medium rain
	Tomarioru	1840	W	1940	W	W	Medium 2.2 Heavy rain
	Motodomari	1917	S	2020	S	S	Medium ... Light rain
	Chidori	1920	N	2100	SW	N-SW	Medium ---
	Miho	2025	N	2110	S	N-S	Medium ... Heavy rain
	Ochiai	2107	N	2120	E	N-E	Medium 0.3 Light rain
	Tonnai	2305	E	2315	E	E	Strong ... Light rain
2	Noto	0115	E	0130	E	E	Medium ... Medium
3	Ambetsu	0417	NW	0426	NW	NW	Medium 9.8 Medium
4	Ambetsu	0426	W	0429	W	W	Medium --- Thunder only
4	Ambetsu	2043	NW	2144	NNW	NW-NNW	Weak 0.9 Thunder only with medium rain
11	Ambetsu	1947	NW	2226	NNW	NW-NNW	Weak ---
16	Ambetsu	1745	NW	1847	NNE	NW-N-NNE	Weak 0.5 Thunder only with medium rain
16	Esutoru	2125	W	2340	E	W-W-E	Weak 1.0 Light rain
16	Kami-chikuka	2200	W	2235	W	W	Medium 0.6 Light rain
16	Chikuka	2233	SW	2316	SE	SW-S-SE	Weak 2.8 Heavy rain
16	Noto	2300	?	2320	?	?	Weak 6.0 Heavy rain
20	Noyoshi	1930	W	2130	N	W-N	Medium ... Light rain

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Table 2.

INSOLATION

Amount of Direct Solar Radiation. An outline of direct solar radiation observations measured by silver-plated measuring devices at Odomari, Esotoru and Shikuka (when the sun was not covered by clouds).

JULY 1939

Amount of Direct Insolation

Date	Exact Solar Time in the Area	Amount of Solar Radiation (Fermi-Calorie/cm ² -minute)	Route of Passage thru the Atmosphere (Sec Z)	Exact Solar Time in the Area	Amount of Solar Radiation (Fermi-Calorie/cm ² -minute)	Route of Passage thru the Atmosphere (Sec Z)	Exact Solar Time in the Area	Amount of Solar Radiation (Fermi-Calorie/cm ² -minute)	Route of Passage thru the Atmosphere (Sec Z)	Exact Solar Time in the Area	Amount of Solar Radiation (Fermi-Calorie/cm ² -minute)	Route of Passage thru the Atmosphere (Sec Z)	
06.0	9 15.4 17 02.3 18 --- 21 --- 26 ---	1.262 1.200 --- --- ---	0.76 0.72 --- --- ---	12 02.4 12 00.3 --- 12 32.1 ---	1.386 1.319 --- 1.404 ---	0.92 0.90 --- 0.88 ---	15 16.4 15 13.7 --- 15 33.0 ---	1.320 1.220 --- 1.173 ---	0.70 0.69 --- 0.64 ---	0.78	0.74	0.76	
Average	No 2	1.231	0.74	No 3	1.370	0.90	No 5	1.250	0.68	0.76			

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SEIKOKA													
10													
11	9	40.0	1.377	1.28	0.79	—	—	—	—	—	—	—	—
13	—	—	—	—	—	12	08.6	1.374	1.12	0.75	—	—	—
17	—	—	—	—	—	12	17.4	1.363	1.13	0.75	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—
29	9	06.2	1.187	1.44	0.72	—	—	—	—	—	—	—	—
Average	No 2	1.282	1.36	0.76	No 3	1.370	1.13	0.75	No 2	1.298	1.50	0.78	0.78

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Table 3.

INSOLATION AT SEA LEVEL

Monthly observations at Odomari made by measuring solar radiations by the ROBLIJI* method giving sea level solar radiations (including air radiation).

July 1939 Insolation at Sea Level (gram-calorie/cm²-minute)

ODOMARI									
Average	0300	0400	0500	0600	0700	0800	0900	1000	1100
Hourly	0.00	0.01	0.10	0.23	0.46	0.64	0.83	0.96	1.07
Value	0.00	0.01	0.10	0.23	0.46	0.64	0.83	0.96	1.07
Solar Radiation at Sea Level	Daily Extremes in Value for 1-minute	Daily Amount	Maximum Date Time	Amount Date Time	Minimum Date Time	Average			
Reckoning	2.11	13	1145	0.49	30	1215	1.52		
Duration	Daily Reckoning	Daily Amount	Entire Month	Daily Amounts	Entire Month	Daily Amounts	Entire Month	Maximums for 1 hour	Notes
	659	761	918	673	501	192	195	469	14. 15. 743
of Solar Radiation at Sea Level	Monthly Totals	Average Amount	Maximum Amount	No. of Days	Minimum Days	Average Days	Extremes Days	Days	
	659	842	812	532	390	595	657	328	31
	1,7072	551	947	9	162	30	73	104	9
	(sic)								

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Table 4. WEATHER SUMMARY TABLE July 1939

Place Name	Item	Average Pressure (mm)		Temperature (°C)				Average Vapor Tension (mm)		Average Humidity (%)	
		Sea Level	Freezing Point	Compared Year	Average High	Minimum Low	Date	Vapor Tension	Humidity		
Odomari	Average Pressure (mm)	757.0	753.6	15.6 (+) 0.8	19.6	12.5	25.7	17	7.8	9	11.5
Honto	Average Pressure (mm)	756.6	756.0	17.1 (+) 0.9	19.9	14.4	24.9	16	10.0	1	12.1
Maoka	Average Pressure (mm)	756.8	754.0	17.0 (+) 1.3	20.2	13.9	25.8	16	8.1	9	12.4
Ochiai	Average Pressure (mm)	757.1	753.2	16.8 (+) 1.5	23.0	11.9	32.9	16	5.3	10	11.9
Esutoru	Average Pressure (mm)	756.5	752.6	16.2	19.4	13.5	26.6	16	8.8	9	12.2
Shikoku	Average Pressure (mm)	756.6	756.0	14.5 (+) 0.9	18.5	11.0	33.1	16	4.6	10	11.1
Ambetsu	Average Pressure (mm)	756.3	748.6	16.0 (+) 0.9	20.7	11.9	27.2	16	6.8	9	11.2
Wind											
Place Name	Item	Average Velocity (m/sec)	Pervailing Wind Direction	Maximum Velocity (m/sec)	Direction	Date	Average Sky Cover (0-10)	Total Hours	Hours of Sunshine %	Total Precipitation (mm)	Maximum Daily Amount
Odomari	Average Velocity (m/sec)	4.1	SSW	12.2	ESE	19	8.2	160.3	34	60.1 (-) 30.3	23.3 14
Honto	Average Velocity (m/sec)	3.1	E	13.9	E	6	8.4	121.3	25	95.5 (+) 7.4	35.7 14
Maoka	Average Velocity (m/sec)	2.8	SSW	10.8	S	19	8.7	136.1	29	58.0 (-) 32.3	13.6 14
Ochiai	Average Velocity (m/sec)	3.8	S	13.8	W	16	7.4	214.8	45	38.3 (-) 52.1	11.8 31
Esutoru	Average Velocity (m/sec)	3.4	SSW	11.1	SSW	18	7.7	194.2	40	44.6	20.5 5
Shikoku	Average Velocity (m/sec)	3.7	SSW	13.1	SSE	9	7.5	194.4	40	32.3 (-) 57.8	9.6 21
Ambetsu	Average Velocity (m/sec)	2.4	SSW	16.5	SSW	19	7.8	211.1	43	67.2 (-) 3.0	25.3 21

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Table 4. (contd)

Place Name	Item Year	Precipi- tation $\geq 0.1\text{mm}$	Compared to Average	Snow Year	Elec- trical Storms	Mist	Fine	Cloudy	No.	Storm	Frost	Temperature																	
												< -10°	$\leq -10°$	$\geq 10°$	< 10°	Average	High	Low	Average	High	Low	Average	High	$< 0°$	$\geq 0°$				
Odomari	10	(-)	3	-	-	13	---	20	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Honto	14	-	0	-	-	2	1	24	10	22	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2				
Maoika	16	(+)	2	-	-	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Ochiai	18	(+)	2	-	-	1	12	1	1	15	6	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
Esutoru	11	-	-	-	-	1	11	1	1	19	4	3	3	3	3	3	3	3	3	3	3	3	3	3					
Shikuka	12	(-)	3	-	-	1	9	1	1	16	5	6	6	6	6	6	6	6	6	6	6	6	6	6					
Ambetsu	11	(-)	2	-	-	2	17	1	20	5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				
Earthquake Occurrences																Tremors				Tremors				No.					
Odomari	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
Honto	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Maoika	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Ochiai	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-
Esutoru	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Shikuka	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ambetsu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-
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Table 5.

WEATHER TABLES Odomari July 1939

Date	Item	Average Atmos- pheric Pressure at Sea Level (mm) 700+	Temperature (°C)				Aver- age Humid- ity(%)	Aver- age Vapor Ten- city (mm)	Wind maxi- mum rec- tion city m/sec all aver- age) m/sec	
			Aver- age	Maxi- mum	Mini- mum	High Low				
1		56.0	12.9	15.9	10.0	89	9.8	4.5	7.2	WSW
2		55.8	15.3	21.2	11.4	85	10.9	2.8	4.9	WSW
3		58.1	15.3	18.9	12.5	81	10.5	4.7	6.8	SSW
4		58.7	15.5	19.9	10.1	78	10.0	3.8	8.0	SSW
5		62.0	14.4	19.5	9.5	83	10.2	4.4	8.3	ENE,NE
6		62.6	9.8	11.6	8.9	90	8.1	9.1	10.0	ENE
7		60.0	9.6	10.8	8.8	94	8.4	6.7	9.0	ENE
8		60.5	12.1	16.5	9.3	82	8.6	5.2	7.5	NE
9		61.1	14.1	19.7	7.8	67	7.6	5.1	8.6	SE
10		60.1	14.1	18.2	8.9	69	8.2	3.4	5.4	S
Average		59.5	13.3	17.2	9.7	82	9.2	5.0		
Normal Yr		57.5	12.8	16.8	10.8	88	98	3.5		
11		56.5	13.0	18.4	9.5	88	98	2.5	4.8	S
12		53.9	16.0	19.2	11.9	89	116	2.1	4.2	ESE,ENE
13		55.6	14.6	19.4	12.1	90	111	2.6	5.1	SW
14		53.7	14.9	16.8	11.6	97	123	3.9	7.8	SSW
15		48.7	18.2	21.3	14.7	91	141	4.0	6.0	SSW
16		48.4	19.4	23.2	16.7	86	144	4.6	8.8	SW
17		53.8	19.3	25.7	15.1	81	133	2.9	4.2	E
18		58.6	17.1	22.2	13.7	86	123	3.1	5.8	SSW
19		53.2	18.2	22.0	15.0	82	127	5.3	12.2	ENE
20		58.4	15.1	18.9	13.5	84	107	4.2	10.0	E
Average		54.1	16.6	20.7	13.4	87	122	3.5		
Normal Yr		57.6	14.9	18.7	11.4	89	113	3.4		
21		56.5	17.5	23.4	13.3	90	135	3.4	8.1	E
22		59.9	16.3	21.9	13.5	81	111	3.4	5.3	NE
23		60.8	14.7	20.6	12.6	87	108	3.6	7.1	E
24		58.5	16.0	19.9	13.3	90	121	2.5	3.9	ENE
25		57.2	18.1	22.6	15.5	89	136	2.3	4.3	SW
26		60.7	17.1	22.8	13.3	90	130	2.6	5.3	S
27		58.7	17.8	21.3	15.0	91	136	2.3	4.1	SE
28		54.3	18.5	20.4	17.3	94	147	3.5	5.3	SW
29		53.9	18.5	22.9	15.8	92	146	3.8	9.6	ENE
30		55.4	15.9	18.2	15.3	95	128	7.6	10.5	E
31		55.7	14.1	15.2	12.5	94	117	8.7	11.9	ENE
Average		57.4	13.9	20.8	14.1	90	129	4.0		
Normal Yr		57.0	20.1	13.0	90	129	3.4			
Avg for Mo		57.0	15.6	19.6	12.5	86	115	4.1	Max12.2	ENE
Normal Yr		57.2	14.8	18.6	11.3	89	113	3.4	Max15.6	S

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WEATHER TABLES Odomari (Contd)

Average Hours of Sky Cover (0-10) ^a	Average Sunshine (Jordan Method)	Precipitation (mm)	Evaporation (from fall a box) (mm)	Avg Snow (cm)	Avg Ground Temp (°C)	Minumum Temperature (°C)	Sea Water marks (Coastal)	Relative humidity (%)
7.2	6.7	—	3.6	—	17.5	8.8	13.0	—
5.4	7.6	0.0	4.9	—	20.3	9.6	13.9	—
3.2	11.8	—	5.4	—	20.7	10.6	16.1	—
6.6	8.0	0.0	4.8	—	20.7	7.0	16.3	—
9.8	0.6	0.0	3.2	—	19.2	9.6	15.2	—
10.0	—	0.0	(1.6)	—	12.5	8.5	10.0	—
10.0	—	8.6	(1.7)	—	11.4	8.5	10.4	—
9.4	—	0.0	3.5	—	15.0	9.1	12.2	—
4.4	14.2	—	5.6	—	18.5	6.0	13.0	—
8.8	12.9	—	4.5	—	18.2	6.1	13.6	—
7.5	61.7	8.6	3.9	—	17.4	8.4	13.4	—
7.6	53.6	24.4	3.3	—	17.5	—	—	—
8.4	1.7	—	3.4	—	18.4	6.6	14.2	—
9.6	3.0	—	3.0	—	21.9	10.5	15.7	—
8.4	4.5	0.0	4.8	—	22.1	11.5	15.6	—
10.0	—	23.3	(0.3)	—	14.3	11.9	16.1	—
6.0	7.5	1.6	5.4	—	21.0	14.5	16.8	—
8.6	10.9	—	6.3	—	22.0	15.5	17.3	—
5.6	13.3	—	5.7	—	25.2	14.4	17.7	—
5.6	8.4	—	6.3	—	23.2	11.7	17.9	—
8.4	9.9	—	5.3	—	20.7	13.0	17.9	—
10.0	0.2	0.3	(2.2)	—	19.4	13.2	15.8	—
8.1	59.2	25.2	4.2	—	20.8	12.3	16.5	—
7.6	52.3	28.7	3.0	—	19.1	—	—	—
7.8	5.6	0.8	(3.9)	—	22.2	13.3	16.7	—
8.8	8.8	—	4.5	—	21.9	13.0	16.2	—
10.0	0.1	0.2	(2.5)	—	17.0	10.5	17.0	—
10.0	3.4	0.0	2.6	—	20.7	13.4	17.2	—
7.6	3.8	—	3.6	—	20.4	13.5	18.5	—
5.6	11.7	—	4.5	—	25.9	10.9	18.6	—
9.6	6.1	—	3.5	—	23.9	16.0	18.8	—
10.0	—	0.1	(1.6)	—	20.1	16.5	18.8	—
10.0	—	1.6	(1.1)	—	20.6	15.0	19.0	—
10.0	—	17.5	(0.8)	—	16.6	13.7	16.8	—
10.0	—	6.1	(1.2)	—	16.4	12.1	14.5	—
9.0	39.4	26.3	2.7	—	20.5	13.4	17.5	—
7.5	54.1	37.8	3.0	—	20.2	—	—	—
Ttl	160.3	—	—	—	—	—	—	—
8.2 %	3.4	Ttl 60.1	3.6	—	19.6	11.4	15.8	—
Ttl	165.2	—	—	—	—	—	—	—
7.6 %	3.5	Ttl 90.4	3.1	—	19.0	9.9	—	—

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Table 6.

WEATHER TABLES / Honto 7 July 1939

Item	Average Atmos- pheric Pressure at Sea Level	Average High (mm) 700+	Temperature (°C)	Aver- age Aver- age age Humid- ity	Aver- age Vapor Humid- ity	Maxi- mum Ten- sion	Wind maxi- mum velo- city (over- all avg) m/sec	Wind m/sec
Date								
1	56.2	12.8	14.7	10.0	90	9.9	4.3	7.6 S
2	56.1	14.7	17.1	13.5	86	10.6	5.1	7.6 SSW
3	58.5	14.0	16.5	11.2	88	10.4	4.8	6.8 S
4	58.3	17.9	20.7	12.7	75	11.6	4.7	7.4 SSW
5	60.8	17.6	19.5	14.2	73	10.9	4.4	7.4 E
6	60.5	13.6	15.8	12.3	79	9.1	8.5	13.9 E
7	58.3	13.4	14.9	12.4	84	9.7	3.8	7.8 E
8	59.5	14.1	16.8	11.8	67	8.0	1.0	2.4 SE
9	60.1	16.1	22.4	10.5	60	8.0	1.8	3.6 SSE
10	59.1	16.6	20.4	11.2	71	10.0	3.0	7.1 E
Average	58.7	15.1	17.9	12.0	77	9.8	4.1	
Normal Yr	57.0	14.1	17.2	10.7	84	10.0	3.0	
11	55.9	15.2	19.4	10.4	81	10.4	1.8	4.0 ENE
12	54.2	15.9	17.9	14.2	93	12.5	1.0	2.9 SSW
13	55.7	15.5	17.7	13.8	89	11.6	0.7	1.9 NNW, SW
14	53.1	17.1	20.0	12.8	93	13.5	3.3	7.2 SSW
15	48.9	18.6	22.2	17.1	90	14.4	4.2	6.7 SW
16	48.7	21.4	24.9	19.1	80	15.1	3.9	6.3 SW
17	54.5	18.2	21.5	16.2	79	12.3	2.9	5.4 N
18	58.8	18.2	21.5	12.6	75	11.4	2.9	7.3 SSW
19	53.2	21.1	23.5	19.1	77	14.3	6.9	11.7 S
20	57.2	19.6	23.8	16.2	76	13.1	3.0	8.2 E
Average	54.0	18.1	21.2	15.2	83	12.9	3.1	
Normal Yr	57.0	16.5	19.5	13.3	84	11.9	3.4	
21	56.6	19.4	21.5	16.6	89	15.0	3.7	6.3 SSW
22	59.4	17.4	20.0	15.8	91	13.4	1.0	3.7 NNW
23	60.4	16.6	18.6	13.3	84	11.8	0.7	2.5 E
24	58.4	17.3	19.6	15.3	89	13.2	0.6	2.6 NW
25	57.3	17.4	19.3	16.1	92	13.6	2.0	3.5 N
26	60.6	16.6	19.7	14.9	93	13.0	0.7	2.6 E
27	57.9	19.4	23.6	14.6	81	13.6	3.2	5.2 SW
28	54.2	19.9	20.9	19.1	88	15.3	3.5	6.7 S
29	52.8	20.4	23.8	19.0	86	15.3	2.3	8.0 E
30	53.8	18.4	19.8	16.8	83	13.0	3.7	7.2 E
31	54.8	16.6	18.2	14.8	86	12.0	2.3	7.8 E
Average	56.9	18.1	20.5	16.0	87	13.6	2.1	
Normal Yr	56.5	18.0	21.2	14.5	84	13.0	3.7	
Avg for Mo	56.6	17.1	19.9	14.4	83	12.1	3.1	Max 13.9 E
Normal Yr	56.8	16.2	19.4	12.9	84	11.7	3.4	Max 14.6 E

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WEATHER TABLES. [Monte] (Contd)

Average Hours of Sun- shine (0-10)	Pre- cipita- tion (mm)	Evapo- ration (from a fall box)	Avg Snow- depth (cm)	Avg Ground Temp- erature (°C)	Min- imum Temp- erature (°C)	Sea Water Temp- erature (°C)	Re- marks
Cover (0-10)	Jordan	Method	Box	Level Ground (Coastal)	Level Ground (1000 m)	Water Temperature (°C)	
9.8	—	—	3.2	14.7	9.5	6.5	—
8.4	5.9	—	4.3	19.6	11.0	11.0	—
6.0	4.9	—	(4.1)	17.4	18.0	11.2	—
9.8	4.6	2.2	6.3	19.5	19.3	8.0	—
10.0	—	—	3.6	18.6	13.3	10.3	—
10.0	—	—	1.9	(1.7)	15.1	10.5	—
10.0	—	—	16.7	(0.6)	14.6	10.6	11.8
9.8	—	—	0.1	3.9	14.6	10.1	8.7
2.8	13.4	—	7.8	—	18.7	5.1	12.0
7.2	9.6	—	4.8	—	19.2	8.5	12.7
8.4	38.4	—	20.9	4.0	—	17.2	9.6
8.0	48.0	—	25.2	3.5	18.5	—	10.3
8.2	6.6	—	(5.2)	—	22.2	11.9	12.5
10.0	2.1	—	0.4	(4.6)	—	21.5	13.0
8.0	2.3	—	0.3	4.2	—	20.9	13.3
10.0	0.8	—	35.7	(1.1)	—	18.1	8.4
6.4	4.9	—	4.6	6.1	—	21.1	15.5
7.0	13.1	—	—	7.0	—	22.8	16.0
3.4	11.6	—	—	6.5	—	23.7	14.6
2.2	13.4	—	—	8.0	—	23.2	10.3
9.8	3.3	—	—	5.5	—	21.2	17.0
8.6	3.2	—	—	3.8	—	21.1	14.1
7.4	61.1	—	41.0	5.2	—	21.6	13.4
7.9	48.4	—	32.6	3.5	—	19.5	—
9.2	2.0	—	4.5	(3.1)	—	21.3	15.5
10.0	4.5	—	1.5	3.5	—	21.5	15.1
9.8	—	—	0.0	4.1	—	18.1	11.1
9.4	1.9	—	1.6	(3.1)	—	20.3	12.4
8.6	0.9	—	—	3.9	—	19.6	14.1
8.0	6.1	—	—	4.7	—	23.0	14.1
9.0	6.6	—	—	5.2	—	22.1	13.9
10.0	—	—	—	1.9	—	20.4	17.5
10.0	—	—	—	5.8	(3.6)	—	21.2
10.0	—	—	—	15.9	(2.0)	—	18.9
9.4	—	—	4.3	(1.9)	—	17.8	12.2
9.4	21.9	—	33.6	3.4	—	20.4	14.3
8.1	59.6	—	30.3	3.9	—	22.6	—
	Ttl	121.3					
8.4 %	2.5	Ttl	95.5	4.2	—	19.7	12.5
		Ttl	156.0				
7.7 %	3.3	Ttl	88.1	3.7	—	10.6	11.4

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Table 7. WEATHER TABLES Maōka July 1939

Item	Average	Temperature (°C)			Aver-	Wind	Maxi-	Di-	
	Atmos-	Aver-	Maxi-	Mini-					
	Pressure	age	High	Low	Humid-	Ten-	city	Velo-	tion
	at Sea	700+			sion	(Over-	city	all	
	Level	(mm)	700+		(%)	(mm)	avg	m/sec	
Date									
1	56.0	12.5	14.9	10.5	94	10.1	4.2	7.4	SSW
2	55.9	13.8	16.4	11.8	93	10.8	3.2	7.4	SSW
3	58.3	13.0	15.7	9.4	94	10.4	4.1	5.8	SSW
4	58.2	17.4	20.1	9.3	78	11.6	4.3	6.7	S
5	60.8	17.7	20.5	14.0	77	11.6	3.3	7.1	E
6	61.1	14.5	18.0	12.5	83	10.1	5.2	8.4	ESE
7	59.0	13.7	15.3	12.6	.88	10.3	1.8	3.5	E
8	59.7	15.0	18.0	12.0	.67	8.4	1.6	4.3	ESE
9	60.5	16.3	22.5	8.1	59	8.0	2.1	4.6	SE
10	59.5	15.8	21.0	9.8	.76	10.2	3.1	9.8	SE
Average	58.9	15.0	18.2	11.0	81	10.1	3.3		
Normal Yr	57.3	13.7	17.4	10.4	85	10.0	3.1		
11	56.1	15.5	18.5	10.4	82	10.7	2.3	4.3	ESE
12	54.5	15.8	18.4	14.1	96	12.8	1.6	2.9	WSW
13	55.9	15.1	17.8	13.6	93	14.4	1.8	3.3	SW
14	53.2	16.5	21.5	13.1	95	13.8	2.4	4.8	SSW
15	48.8	17.7	19.9	16.1	96	14.4	3.3	5.8	SW
16	48.4	21.6	25.8	16.6	83	15.8	3.8	7.8	SSW
17	54.6	18.0	23.4	14.4	84	12.8	2.4	4.7	SSW
18	58.7	18.3	21.6	12.5	74	11.6	3.6	5.3	SES
19	52.6	21.2	25.0	17.7	81	12.5	6.7	10.8	S
20	57.4	19.1	22.4	17.1	76	15.1	2.6	8.1	ESE
Average	54.0	17.9	21.4	14.6	86	13.4	3.0		
Normal Yr	57.2	15.8	19.2	12.5	87	11.6	3.3		
21	56.6	18.2	21.3	16.5	95	14.7	2.7	5.8	SSW, SW
22	59.7	17.8	21.7	16.2	85	12.8	1.7	3.6	ESE
23	60.5	17.1	20.5	14.6	86	12.4	1.4	3.6	ESE
24	58.5	17.1	19.6	15.6	91	13.2	1.2	2.0	ESE, WSW
25	57.6	17.1	18.8	16.0	95	13.7	1.9	3.2	SSW
26	60.8	16.3	19.1	13.8	97	13.3	1.3	3.2	WSW
27	58.0	19.3	23.7	14.1	83	13.6	3.3	5.0	SSW
28	54.3	19.1	21.5	17.6	93	15.2	3.1	7.5	S
29	53.5	20.9	23.7	18.8	87	15.9	1.4	3.9	E
30	54.8	18.3	20.5	17.0	81	12.8	3.6	4.4	ENE
31	55.6	16.3	18.3	15.0	83	11.4	3.4	6.7	E
Average	57.3	17.9	20.8	15.9	89	13.5	2.2		
Normal Yr	56.4	17.3	20.8	13.9	86	12.8	3.6		
Avg for Mo	56.8	17.0	20.2	13.9	85	12.4	2.8	Max 10.8	S
Normal Yr	57.0	15.7	19.1	12.3	86	11.5	3.3	Max 16.7	SSW

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WEATHER TABLES Macka (Contd)

	Average Sky Cover (0-10)	Hours of Sun- shine (Jordan)	Pre- cipitation (mm)	Evapo- ration (from fall box)	Avg. Snow- (cm)	Avg. Ground Level (Coas- tal)	Min- imum Temp- erature (°C)	Sea Water (1000 hrs)	Re- marks
Date									
1	9.4	3.2	0.2	(2.3) ---	14.3	10.0	10.1	10.4	10.4
2	10.0	5.9	---	3.0 ---	18.7	7.5	10.4	10.4	10.4
3	7.2	5.0	---	2.7 ---	15.5	7.0	12.0	12.0	12.0
4	9.4	4.5	0.1	(3.6) ---	20.3	7.0	11.7	11.7	11.7
5	10.0	1.2	0.0	3.0 ---	18.9	8.7	12.6	12.6	12.6
6	10.0	---	2.3	(2.0) ---	15.7	10.2	11.5	11.5	11.5
7	10.0	---	10.6	(2.1) ---	15.0	12.0	11.8	11.8	11.8
8	10.0	---	0.5	3.0 ---	15.0	11.1	12.0	12.0	12.0
9	4.8	14.0	---	5.5 ---	18.6	11.6	13.0	13.0	13.0
10	7.4	8.6	---	4.2 ---	17.9	6.6	13.0	13.0	13.0
Avg	8.8	42.3	13.7	3.1 ---	17.0	8.5	11.8	11.8	11.8
N/Y	7.8	49.5	18.6	3.2 ---	17.6	---	---	---	---
11	8.4	10.6	0.0	(3.4) ---	19.9	8.1	14.3	14.3	14.3
12	10.0	1.0	0.4	(2.1) ---	18.9	14.7	16.5	16.5	16.5
13	10.0	0.5	0.8	2.5 ---	19.3	13.6	16.0	16.0	16.0
14	10.0	---	13.6	(0.8) ---	17.3	13.6	17.1	17.1	17.1
15	7.8	4.4	2.6	3.8 ---	20.3	15.5	16.0	16.0	16.0
16	6.4	13.4	---	5.5 ---	23.4	14.5	16.0	16.0	16.0
17	6.6	12.6	---	4.9 ---	23.8	12.1	18.2	18.2	18.2
18	1.0	13.7	---	5.7 ---	22.8	10.5	16.5	16.5	16.5
19	9.4	6.5	0.0	5.0 ---	20.9	15.1	17.0	17.0	17.0
20	7.8	4.1	---	3.1 ---	20.6	16.2	16.5	16.5	16.5
Avg	7.7	66.7	17.4	3.7 ---	20.7	13.4	16.4	16.4	16.4
N/Y	7.7	49.1	3.1	---	19.0	---	---	---	---
21	10.0	2.0	12.2	(2.4) ---	21.4	14.8	17.0	17.0	17.0
22	7.2	8.3	0.2	3.2 ---	23.8	15.0	17.6	17.6	17.6
23	9.6	1.0	0.0	2.0 ---	20.1	13.5	16.0	16.0	16.0
24	10.0	2.0	0.3	(1.6) ---	19.2	10.0	16.5	16.5	16.5
25	10.0	1.9	0.2	2.2 ---	19.6	10.0	17.0	17.0	17.0
26	10.0	2.5	---	3.2 ---	20.8	11.4	17.7	17.7	17.7
27	8.8	9.4	---	2.2 ---	22.4	11.0	18.5	18.5	18.5
28	10.0	---	0.0	2.4 ---	19.7	14.7	18.0	18.0	18.0
29	10.0	0.1	0.4	(1.2) ---	21.4	15.1	18.6	18.6	18.6
30	10.0	---	9.6	(0.8) ---	17.8	11.4	17.4	17.4	17.4
31	10.0	---	4.0	(2.3) ---	16.2	10.4	15.0	15.0	15.0
Avg	9.6	27.2	26.9	2.1 ---	20.2	12.5	17.2	17.2	17.2
N/Y	7.4	57.7	38.5	3.4 ---	19.8	---	---	---	---
		Ttl	136.1						
A/M	8.7	%	2.9	Ttl	58.0	3.0	11.5	15.2	
		Ttl	156.2						
N/Y	7.6	%	3.3	Ttl	90.3	3.2	10.5	15.0	

(TN: N/Y = Normal Year; A/M = Average for Month.)

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Table 8.

WEATHER TABLES /Ochiai/ July 1939

Item	Average Atmos- pheric Pressure at Sea Level	Temperature (°C)				Avg Vapor Ten- sion (mm)	Avg Wind Velocity m/sec	Wind Direction m/sec
		Aver- age High (mm) 700+	Maxi- mum Low (mm)	Mini- mum Humid- ity (%)	Avg City			
Date								
1	55.3	16.4	23.6	9.8	80	11.0	5.2	7.4 SSW
2	56.5	13.5	18.1	10.1	87	10.0	2.7	5.0 SSW
3	57.4	17.9	24.3	10.9	78	11.6	4.6	6.8 W
4	57.7	17.8	24.3	11.3	74	10.9	5.8	9.0 SSW
5	63.0	11.6	15.6	8.1	93	9.5	3.3	4.2 NNE
6	64.2	8.7	9.6	7.8	97	8.1	2.8	4.5 NE
7	61.4	9.1	10.4	8.5	96	8.3	2.8	3.6 NE
8	61.5	11.4	16.7	8.6	87	8.7	2.0	4.0 NE
9	61.5	13.6	21.7	7.4	80	9.1	1.7	4.3 W
10	59.9	15.4	24.0	5.3	68	8.3	4.0	9.2 SSW
Average	59.8	13.5	18.8	8.8	84	9.6	3.5	
Normal Yr	57.4	13.3	18.6	8.7	85	9.6	3.1	
11	55.8	16.6	23.7	6.9	76	10.6	5.5	9.8 S
12	54.2	17.0	24.3	13.0	82	11.7	2.8	4.4 NNE
13	55.4	16.5	22.2	12.2	84	11.6	2.3	5.4 S
14	52.8	16.8	23.4	11.1	92	13.0	5.3	9.8 S
15	48.1	21.3	28.7	15.8	87	16.3	4.2	6.4 S
16	47.2	24.7	32.9	18.9	77	17.5	6.4	13.8 W
17	54.0	18.6	25.3	13.3	79	12.3	3.0	5.3 S
18	57.8	20.6	29.0	11.9	70	12.0	4.5	7.8 S
19	52.2	22.6	31.8	16.4	70	14.4	7.8	11.8 S
20	57.9	18.1	25.3	13.3	77	11.8	3.8	8.9 S
Average	53.5	19.3	26.7	13.3	80	13.1	4.6	
Normal Yr	57.2	15.4	20.7	10.8	85	11.1	3.2	
21	56.3	17.9	29.7	12.5	88	13.4	5.5	9.4 S
22	60.2	17.6	25.7	12.4	77	11.1	2.0	3.8 ENE
23	61.3	15.4	20.2	11.1	83	10.6	1.9	4.6 ENE
24	59.0	15.3	19.1	10.9	92	11.9	1.6	5.8 S
25	56.9	19.5	25.2	14.7	84	13.9	3.1	5.3 S
26	60.3	20.6	30.6	14.2	80	14.0	3.4	6.5 S
27	57.8	20.3	29.8	14.6	82	14.2	4.7	7.8 SSW
28	53.7	21.1	26.0	17.4	85	15.7	6.4	9.3 S
29	54.8	17.0	19.6	14.8	96	13.9	2.3	3.3 NNE
30	57.2	15.5	18.2	14.1	95	12.4	3.2	4.7 NE
31	58.2	13.2	14.5	11.7	97	11.5	3.8	5.5 NE
Average	57.8	17.6	23.5	13.5	87	12.9	3.4	
Normal Yr	56.4	17.0	22.4	12.3	85	12.2	3.2	
Avg for Mo.	57.1	16.8	23.0	11.9	84	11.9	3.8	Max 13.3 W
Normal Yr	57.0	15.3	20.6	10.7	85	11.0	3.2	Max 12.8 SSW

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WEATHER TABLES /Ochiai/ (Contd)

	Average Cover (0-10)	Hours of Sun shine	Pre- cipi- tation (mm)	Evapo- ration (from fall box) (mm)	Avg Snow- depth (cm)	Avg Ground Temp- erature (°C)	Min- imum Temp- erature (°C)	Sea Level Ground (Coas- tal) Temp- erature (°C)	Re- marks
Date	ME	RE	RE	RE	RE	RE	RE	RE	RE
1	4.6	13.1	0.3	(4.3)	--	17.2	5.5	17.7	Re
2	9.0	5.1	0.4	(4.1)	--	18.4	8.9	18.0	Re
3	1.0	14.0	0.7	6.0	--	22.0	8.9	21.0	Re
4	7.4	7.0	--	4.4	--	20.1	7.6	20.0	Re
5	10.0	--	0.8	(0.3)	--	14.5	8.0	14.0	Re
6	10.0	--	1.3	(0.6)	--	11.6	7.7	11.0	Re
7	10.0	--	0.1	(0.8)	--	11.5	8.1	10.5	Re
8	9.6	--	0.2	(2.6)	--	13.6	8.1	13.0	Re
9	4.0	10.5	--	5.3	--	19.3	5.7	19.0	Re
10	5.2	14.3	--	6.4	--	20.1	3.0	20.0	Re
Avg	7.1	64.0	3.8	3.5	--	16.9	7.2	16.5	Re
N/Y	7.5	55.6	31.4	3.7	--	17.0	....	16.5	Re
11	3.2	15.0	--	5.6	--	22.2	3.8	22.0	Re
12	9.8	3.9	1.5	(5.2)	--	19.6	11.8	19.0	Re
13	5.4	7.8	7.6	5.0	--	22.7	10.6	22.0	Re
14	10.0	6.4	2.7	(2.5)	--	19.4	11.0	19.0	Re
15	5.0	7.0	0.3	4.8	--	24.4	16.0	24.0	Re
16	6.6	11.9	--	6.0	--	27.1	16.5	26.5	Re
17	5.6	9.1	--	5.8	--	24.0	10.7	23.5	Re
18	3.4	13.0	--	6.9	--	25.5	7.9	25.0	Re
19	9.0	5.0	--	6.2	--	25.2	14.1	24.5	Re
20	6.0	9.7	--	5.6	--	23.8	11.2	23.0	Re
Avg	6.4	88.8	12.1	5.4	--	23.4	11.4	22.5	Re
N/Y	7.5	54.5	27.1	3.6	--	18.9	....	18.0	Re
21	7.0	9.8	3.7	(5.2)	--	23.9	12.6	23.0	Re
22	7.4	10.1	1.5	5.5	--	23.2	12.1	22.5	Re
23	9.2	2.7	0.0	3.1	--	19.4	8.9	18.5	Re
24	10.0	0.8	0.1	(2.1)	--	17.9	6.5	17.0	Re
25	8.4	10.1	0.2	5.0	--	21.9	12.1	21.0	Re
26	5.6	11.4	--	6.1	--	26.5	13.6	25.5	Re
27	7.4	10.5	--	6.7	--	24.6	14.7	23.5	Re
28	9.2	6.5	--	3.0	--	24.2	16.5	23.0	Re
29	10.0	0.3	0.1	(1.3)	--	20.2	14.4	19.5	Re
30	10.0	--	5.0	(0.8)	--	17.4	12.7	16.5	Re
31	10.0	--	11.8	(0.2)	--	14.9	11.1	14.0	Re
Avg	8.6	62.1	22.4	3.5	--	21.3	12.3	20.5	Re
N/Y	7.2	63.5	31.8	4.0	--	....	....	....	Re
		Ttl	214.8						
A/M	7.4	%	4.5	Ttl	38.3	4.1	--	20.5	10.3
				Ttl	173.6				
N/Y	7.4	%	3.6	Ttl	90.4	3.8	--	18.7	9.3

(TN: N/Y = Normal Year; A/M = Average for Month)

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Table 9.

WEATHER TABLES Esutoru July 1939

Item	Average Atmos- pheric Pressure at Sea Level (mm) 700+	Temperature (°C)	Aver- age Maxi- mum High Low	Aver- age Min- imum Humid- ity	Aver- age Humid- ity (%)	Wind Avg Wind Velocity mm/sec	Wind Maxi- mum Velocity mm/sec	Wind Direction
Date								
1	54.6	13.4	16.4	10.2	92	10.6	4.7	7.0 SE
2	55.7	13.7	15.7	12.0	96	11.1	2.9	6.0 SE
3	56.2	15.3	18.3	12.8	87	11.2	5.5	9.1 SSW
4	57.3	14.9	16.1	13.0	93	11.7	5.1	9.2 SE
5	62.2	13.5	14.6	12.1	98	11.3	2.2	4.7 ESE
6	63.0	12.9	14.6	11.8	93	10.4	1.6	3.0 N
7	60.6	12.7	14.2	11.7	95	10.4	2.1	3.7 N
8	60.6	13.6	16.1	10.3	89	10.2	1.9	4.2 W
9	60.7	14.7	18.7	8.8	69	8.7	3.2	7.8 SSW
10	58.9	16.4	19.4	12.0	73	10.3	4.4	9.2 SSW
Average Normal Yr	59.0	14.1	16.4	11.5	88	10.6	3.4	
11	55.6	16.0	19.2	13.7	88	11.9	5.9	8.8 SSW
12	53.9	15.1	17.0	12.2	95	12.0	2.9	6.4 SW
13	54.2	15.1	17.6	13.2	95	12.1	2.6	7.2 SW
14	52.2	16.5	19.1	13.0	93	13.0	4.5	8.5 SE
15	47.7	17.4	20.3	15.4	96	14.1	3.2	9.4 SE
16	45.5	21.9	26.6	17.5	87	16.8	7.0	10.7 SSW
17	54.6	16.1	22.7	13.9	90	12.3	3.7	6.3 NW,NNE
18	56.5	18.2	21.9	12.5	73	11.3	6.3	11.1 SSW
19	50.9	18.7	23.5	16.0	87	14.1	5.7	10.7 S
20	57.2	17.3	21.6	14.2	87	12.7	2.7	6.0 S
Average Normal Yr	52.8	17.2	21.0	14.2	89	13.0	4.4	
21	56.7	15.2	21.7	14.3	99	12.7	2.4	5.2 SW
22	60.0	15.9	17.8	13.9	96	12.9	1.8	4.0 SW
23	60.8	18.5	21.0	14.7	79	12.4	2.4	5.2 E
24	58.1	16.4	20.9	14.2	82	11.5	3.4	5.5 SSW
25	57.2	15.9	19.0	14.0	98	13.1	2.5	5.8 S
26	60.0	16.8	20.0	13.6	90	12.7	3.2	6.5 SSW
27	56.4	19.5	23.4	15.5	81	13.7	4.8	9.0 SSW
28	53.3	18.5	21.8	16.0	91	14.4	2.5	4.9 SSW
29	54.2	16.6	18.3	15.7	96	13.3	1.7	4.0 WSW
30	57.7	18.3	23.0	15.0	82	12.8	2.5	5.3 N
31	58.0	17.7	20.1	15.8	78	11.6	1.7	3.8 ESE
Average Normal Yr	57.5	17.2	20.6	14.8	88	12.8	2.6	
Avg for Mo Normal Yr	56.5	16.2	19.4	13.5	89	12.2	3.4 Max 11.1	SSW

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WEATHER TABLES Esutoru (Contd)

Date	Average Sky Cover (0-10)	Hours of Sun- shine	Pre- cipita- tion (mm)	Evapo- ration (from Jordan Method)	Avg Snow- fall (mm)	Avg Ground Level (cm)	Min- imum Temp- erature (°C)	Sea Water Temper- ature (1000 hrs) (°C)	Sea Water Temper- ature (°C)	
									Ground Level (Coastal)	Water Temperature (°C)
1	8.0	11.2	—	1.1	(3.0)	—	16.1	10.0	13.5	22
2	10.0	0.4	—	0.5	2.3	—	16.7	11.5	13.8	—
3	3.0	13.3	—	—	4.3	—	18.4	11.6	14.4	—
4	10.0	—	—	0.2	(0.6)	—	15.7	10.4	14.2	23
5	10.0	—	—	—	20.5	(1.9)	14.3	11.6	14.0	23
6	10.0	0.5	—	—	1.6	—	16.2	11.4	14.3	—
7	10.0	—	—	—	1.8	—	14.1	8.5	14.0	—
8	4.2	9.8	—	—	4.4	—	14.4	9.0	13.7	—
9	1.6	14.2	—	—	5.5	—	16.6	7.2	16.0	—
10	2.0	13.8	—	—	5.4	—	17.3	7.2	16.0	—
Avg	6.9	63.2	—	22.3	3.1	—	16.0	9.8	14.4	—
N/Y	—	—	—	—	—	—	—	—	—	—
11	3.8	13.6	—	—	4.6	—	18.7	10.4	16.2	—
12	9.8	2.3	—	0.2	(1.7)	—	18.3	11.6	16.0	23
13	5.8	9.1	—	0.0	4.2	—	20.1	10.7	16.3	23
14	9.0	6.1	—	—	2.5	—	18.2	11.3	16.0	23
15	7.8	4.5	—	—	(3.6)	—	21.4	11.0	16.5	—
16	7.2	7.3	—	4.9	(5.9)	—	22.9	16.5	16.5	23
17	3.8	12.0	—	0.0	5.3	—	19.4	13.6	17.1	—
18	7.2	12.0	—	—	(6.0)	—	19.3	9.0	15.7	23
19	9.2	4.2	—	1.7	3.9	—	19.8	14.2	16.4	23
20	9.4	4.9	—	0.1	(2.5)	—	19.4	12.8	17.5	23
Avg	7.3	75.9	—	6.9	4.0	—	19.8	12.4	16.4	—
N/Y	—	—	—	—	—	—	—	—	—	—
21	9.2	—	—	7.6	(0.9)	—	16.4	12.2	17.5	23
22	10.0	8.5	—	—	3.4	—	19.7	10.0	17.6	—
23	9.4	5.1	—	—	4.7	—	21.0	13.7	17.9	—
24	10.0	3.2	—	—	(3.5)	—	18.3	9.4	17.8	—
25	8.6	3.2	—	7.4	(1.7)	—	16.3	11.9	18.3	—
26	6.2	9.2	—	0.1	5.1	—	17.0	12.4	18.5	—
27	4.8	11.9	—	—	4.6	—	21.0	13.9	19.0	—
28	8.6	8.6	—	—	3.6	—	19.0	14.0	18.8	—
29	9.0	0.5	—	—	2.7	—	20.8	13.8	19.3	—
30	10.0	4.6	—	—	3.0	—	19.6	12.5	18.3	—
31	10.0	0.6	—	0.3	(2.2)	—	18.0	13.6	18.0	23
Avg	8.7	55.1	—	15.4	3.2	—	18.8	12.5	18.3	—
N/Y	—	—	—	—	—	—	—	—	—	—
Ttl	—	194.2	—	—	—	—	—	—	—	—
A M	7.7	% 4.0	Ttl	44.6	3.4	—	18.2	11.6	16.4	—
N/Y	—	—	—	—	—	—	—	—	—	—

(TN: N/Y = Normal Year; A/M = Average for Month)

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Table 10.

WEATHER TABLES [Shikoku] July 1939

Item	Average	Temperature (°C)			Aver-	Aver-	Wind		Di-
		Atmos-	Aver-	Maxi-			Vapor	Velo-	
Pressure	age	High	Low	mum	mum	city	Ten-	city	tion
at Sea							Ten-	city	
Level							tion (over-	city	
(mm)	700+						(mm)	all	m/sec
Date							avg)	m/sec	
1	54.2	11.0	14.2	7.7	92	9.1	2.1	4.3	SE,ESE
2	55.9	12.0	13.6	11.2	91	9.6	4.2	6.3	S
3	56.2	12.7	16.1	10.6	91	9.9	2.4	6.0	SW
4	56.8	14.1	16.0	11.8	87	10.4	5.9	8.4	S
5	63.4	11.2	14.0	8.9	95	9.5	3.4	5.8	SSW,S
6	64.9	9.7	11.5	8.4	88	7.9	2.8	3.9	SW,SSW
7	62.2	10.4	13.3	8.0	86	8.1	2.5	4.5	S
8	62.2	11.4	13.6	9.1	86	8.6	3.2	5.8	S
9	61.6	11.9	15.0	6.0	87	9.1	6.1	13.1	SSE
10	58.7	11.8	15.0	4.6	87	8.9	6.7	11.7	SSW
Average	59.6	11.6	14.2	8.6	89	9.1	3.9		
Normal Yr	57.7	11.8	15.0	8.8	88	9.1	2.8		
11	55.2	11.9	14.5	6.4	91	9.5	3.5	7.0	SSW
12	54.0	13.9	16.7	11.7	93	11.0	2.5	5.0	SSW
13	54.2	15.7	18.7	12.3	86	11.3	3.8	8.3	SSW
14	51.4	14.8	18.6	10.5	89	11.2	4.1	12.5	SSW
15	47.1	15.6	17.7	13.5	93	12.3	2.7	6.7	S
16	44.7	21.9	33.1	15.0	83	16.2	3.5	10.4	SE
17	53.6	15.5	18.8	13.4	91	12.2	4.6	8.3	SSW
18	55.6	18.1	27.3	10.9	86	13.3	4.2	8.3	SSW
19	49.9	20.6	28.1	13.6	77	14.0	6.4	10.3	SSW
20	58.1	14.0	18.4	12.6	84	10.0	6.1	10.0	S
Average	52.4	16.2	21.2	12.0	88	12.1	4.1		
Normal Yr	57.3	13.7	17.0	10.6	88	10.3	2.8		
21	56.3	14.1	18.9	12.1	94	11.3	2.5	3.9	N
22	59.5	14.0	18.9	8.7	90	10.6	3.7	8.9	SSW
23	61.6	15.0	18.3	12.9	89	11.3	3.7	7.8	S
24	58.9	13.7	17.3	9.7	93	10.8	2.3	3.6	SSW
25	56.9	16.5	21.1	12.7	88	12.2	3.3	8.7	S
26	59.4	15.5	18.7	13.1	93	12.1	2.8	4.5	SSE
27	56.0	17.5	25.3	11.3	90	13.4	3.5	9.8	SSW
28	52.4	18.0	24.2	15.2	90	13.9	2.6	5.4	SSW
29	55.1	16.8	19.9	12.8	88	13.2	3.9	9.3	SSW
30	59.1	16.1	19.1	14.2	90	12.1	1.8	4.3	SSE
31	59.5	14.1	16.7	12.4	88	10.5	2.8	6.9	SE
Average	57.7	15.6	19.9	12.3	90	11.9	3.0		
Normal Yr	56.4	15.1	18.5	11.9	88	11.4	2.8		
Avg for Mo	56.6	14.5	18.5	11.0	89	11.1	3.7	Max13.1	SSE
Normal Yr	57.1	13.6	16.9	10.5	88	10.3	2.8	Max12.3	N

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WEATHER TABLES Shikuka (Contd.)

	Average Sky Cover (0-10)	Hours of Sun shine (Jordah)	Pre- cipitation (mm)	Evapo- ration station (from fall a)	Avg. Snow- depth (cm)	Min- imum Temp- erature (°C)	Sea Water Temp- erature (°C)	Re- marks
Date								
1	10.0	6.3	1.6	(1.0) --	15.3	7.1	14.4	30°C
2	10.0	--	1.4	(2.5) --	13.1	4.0	14.5	30°C
3	7.2	8.7	3.2	3.7 --	15.0	8.8	16.0	30°C
4	10.0	4.8	--	(3.0) --	15.9	9.0	15.5	30°C
5	10.0	--	5.2	(0.7) --	12.2	8.0	12.5	30°C
6	10.0	0.4	--	2.4 --	13.5	6.5	12.5	30°C
7	10.0	3.7	--	3.4 --	14.2	6.0	15.3	30°C
8	4.6	9.4	--	4.5 --	15.0	8.1	15.0	30°C
9	2.0	12.0	--	4.4 --	14.9	4.5	18.1	30°C
10	0.8	12.9	--	4.4 --	14.5	3.0	19.2	30°C
Avg	7.5	58.2	11.4	3.0 --	14.5	6.5	15.3	
N/Y	7.9	43.5	21.1	2.9 --	16.1	....	....
11	4.2	11.4	--	4.1 --	16.7	5.0	14.5	30°C
12	10.0	1.9	0.0	3.5 --	17.1	8.3	15.5	30°C
13	3.6	9.4	--	5.4 --	18.1	9.5	18.5	30°C
14	7.8	10.6	--	(4.0) --	18.2	8.0	21.5	30°C
15	8.0	5.0	0.5	(4.0) --	20.0	12.5	17.3	30°C
16	6.8	6.0	0.3	(7.1) --	19.9	13.5	18.0	30°C
17	6.4	11.1	2.8	4.7 --	19.6	12.2	18.5	30°C
18	7.6	7.3	0.0	6.5 --	25.1	12.5	19.6	30°C
19	9.8	3.5	0.0	4.2 --	21.5	11.7	18.0	30°C
20	8.0	2.8	0.0	2.6 --	17.5	10.5	14.0	30°C
Avg	7.2	68.4	3.6	4.6 --	19.4	10.4	17.5	
N/Y	7.4	50.4	33.0	3.1 --	17.8	....	....
21	8.4	--	9.6	(1.8) --	15.0	10.5	14.3	30°C
22	8.4	7.0	--	5.4 --	18.0	6.8	18.5	30°C
23	8.4	7.5	--	(3.9) --	18.9	11.1	15.5	30°C
24	10.0	2.0	0.7	(2.6) --	17.7	8.5	17.2	30°C
25	5.4	8.0	3.5	4.1 --	20.5	11.9	19.3	30°C
26	6.2	9.0	--	4.1 --	20.6	10.9	19.0	30°C
27	5.8	11.0	--	5.7 --	23.2	10.2	19.3	30°C
28	5.0	10.3	--	5.4 --	24.3	12.0	19.3	30°C
29	7.6	13.0	--	(4.0) --	22.8	10.5	21.0	30°C
30	10.0	--	1.3	(1.8) --	18.9	13.5	18.4	30°C
31	10.0	--	2.2	(2.5) --	16.9	11.2	18.2	30°C
Avg	7.7	67.8	17.3	3.8 --	19.7	10.6	18.2	
N/Y	7.6	55.2	36.0	3.3 --	18.9	....	....
		Ttl 194.4						
A/M	7.5	% 4.0	Ttl 32.3	3.8 --	17.9	9.2	17.0	
		Ttl 149.1						
N/Y	7.9	% 3.1	Ttl 90.1	3.2 --	17.6	9.1	

(TN: N/Y = Normal Year; A/M = Average for Month)

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Table 11.

WEATHER TABLES Ambetsu July 1939

Item	Average Atmos- pheric Pressure at Sea Level (mm)	Temperature (°C)			Aver- age age	Aver- age age	Wind		
		Aver- age age	Maxi- mum High	Mini- mum Low			Vapor Ten- sion (mm)	Avg Velo- city (over- all avg) m/sec	Maxi- mum Veloc- ity city m/sec
Date									
1	54.5	12.6	15.7	11.2	87	9.4	3.6	7.2	SSW
2	55.5	12.5	15.8	10.9	98	10.5	0.7	2.5	NNW
3	55.6	14.1	17.5	11.5	90	10.8	3.8	8.4	SSW
4	56.8	15.6	19.7	12.7	88	11.5	4.5	8.2	SSW
5	62.3	12.8	15.3	11.2	98	10.8	0.4	1.3	W, SW
6	62.9	13.1	16.8	9.0	86	9.7	1.0	1.9	WNW
7	60.6	12.2	16.4	8.9	88	9.4	1.3	2.3	WNW
8	60.7	13.1	19.4	7.5	80	9.0	1.1	2.7	SSE
9	60.2	15.4	21.4	6.8	58	7.4	3.3	7.4	SW
10	58.4	17.0	22.9	9.2	65	9.4	4.5	7.9	SN, SSW
Average	58.7	13.8	18.1	9.9	84	9.8	2.4		
Normal Yr	57.0	13.5	16.9	9.9	86	10.3	2.1		
11	54.8	17.8	22.5	13.3	70	10.4	4.5	10.1	SW
12	54.0	14.0	17.7	12.4	95	11.2	1.5	5.0	SSW
13	54.9	14.9	20.3	9.9	88	10.9	1.6	4.9	SSW
14	51.9	16.9	21.4	14.0	82	11.7	3.6	7.6	SW
15	47.1	16.8	21.0	14.2	91	12.9	2.1	6.1	SW
16	45.2	20.5	27.2	15.0	85	15.1	3.8	9.8	S
17	54.6	16.2	23.4	11.3	78	10.6	2.1	3.3	NNEN
18	54.9	20.8	25.3	11.2	53	9.7	5.8	11.2	SSW
19	50.4	20.1	26.4	14.2	67	11.7	6.9	16.5	SSW
20	57.4	15.9	20.3	12.9	86	11.5	0.9	3.5	SSW
Average	52.5	17.4	22.6	12.8	79	11.6	3.3		
Normal Yr	56.5	15.2	18.8	11.4	86	12.6	2.2		
21	56.4	15.1	18.6	13.4	95	12.1	1.6	4.8	SSW
22	60.1	15.3	20.9	10.5	91	11.7	0.9	2.0	E
23	60.9	17.4	23.5	13.6	76	11.3	1.1	2.5	SSE
24	57.8	16.4	20.4	11.3	80	11.1	2.8	5.9	SSW
25	57.3	15.3	19.5	12.8	94	12.1	1.7	5.2	NW
26	59.4	17.2	22.3	10.7	82	11.8	2.5	7.2	SW
27	56.4	19.4	23.7	15.2	80	13.3	3.7	8.1	SSW
28	53.3	17.4	21.4	14.0	90	13.3	1.5	3.9	SSW
29	54.4	15.5	18.8	13.3	97	12.5	0.8	2.6	NW
30	57.8	17.6	21.7	12.6	83	12.3	0.9	2.8	ENE
31	58.3	18.3	23.3	15.4	83	13.0	1.2	4.4	NW
Average	57.5	16.8	21.3	13.0	86	12.2	1.7		
Normal Yr	55.5	16.4	19.9	12.8	85	12.7	2.6		
Avg for Mo	56.3	16.0	20.7	11.9	83	11.2	2.4	Max 16.5	SSW
Normal Yr	56.3	15.1	18.6	11.4	86	10.9	2.2	Max 14.9	NNE

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WEATHER TABLES [Ambetsu] (Contd)

Date	Average	Hours	Pre-	Evapo-	Avg	Avg	Min-	Sea	Re-
	Sky	Sun-	cipi-	ration	Snow-	Ground	num	Water	marks
(0-10)	Cover	shine	tation	(from fall	Level	Ground	(Coas-		
(0-10)	Jordan	(mm)	a	(cm)	Temper-	Level	tal		
	Method		box)		ature	Temper-	(1000		
			(mm)		(°C)	ature	hrs)		
					(°C)	Water			
						Temper-			
						ature			
						(°C)			
1	8.8	8.3	4.8	(2.1)	--	13.0	7.7	14.0	≡ "T" ≡
2	9.6	---	9.7	(2.7)	--	15.6	12.7	14.1	≡ ≡ ≡
3	8.8	4.8	9.8	3.9	--	18.1	10.4	14.2	≡ ≡ ≡
4	10.0	1.7	0.0	(2.0)	--	18.0	13.7	14.8	≡ ≡
5	10.0	---	1.6	(2.0)	--	16.1	11.6	14.4	≡ ≡
6	10.0	3.2	---	3.0	--	17.6	8.0	15.7	≡ ≡ ≡
7	8.6	1.2	---	3.6	--	17.6	10.7	15.5	≡ ≡ ○ ≡
8	5.6	10.9	---	6.3	--	17.9	11.9	15.4	≡ ○ ≡ ≡
9	1.2	13.1	---	7.9	--	20.5	5.3	15.2	≡ ≡ ≡
10	3.0	13.4	---	6.5	--	19.9	6.7	14.0	≡ ≡ ≡
Avg	7.6	56.6	25.9	4.0	--	17.4	9.9	14.7	
N/Y	7.2	60.0	14.4	3.8	--	18.4	...	...
11	3.2	13.1	---	(4.9)	--	21.9	9.4	15.1	≡ ≡ ≡
12	10.0	---	0.3	(1.7)	--	18.9	13.8	15.2	≈ ≈ ≈ ≈
13	6.8	9.1	---	6.6	--	21.9	9.9	17.5	≡
14	9.6	11.7	---	4.0	--	22.2	11.9	16.5	≡ ≡
15	8.6	4.4	0.0	(4.0)	--	22.8	14.6	16.2	≡ ≡
16	8.6	6.6	5.5	(6.2)	--	24.3	15.8	17.0	≈ ≈ ≈ ≈
17	2.4	13.0	0.8	7.0	--	22.2	9.7	17.8	≈ ○ ≡
18	9.4	12.6	---	(9.2)	--	22.4	9.7	17.0	≈ ≡ ≡
19	7.0	9.6	2.1	6.2	--	22.4	11.3	15.5	≈ ≡ ≡ ≡
20	10.0	---	3.5	(3.4)	--	18.8	11.5	16.4	≡
Avg	7.6	80.1	12.2	5.3	--	21.8	11.8	16.4	
N/Y	6.9	70.0	20.7	4.0	--	19.7	...	...
21	9.0	1.5	25.3	(3.1)	--	17.9	13.8	16.8	≈ ≈ ≡
22	7.4	10.3	0.0	4.6	--	20.5	8.6	16.5	≡ ≡
23	7.0	9.6	---	4.5	--	21.4	12.4	16.8	≈ ≡
24	8.4	7.4	---	(2.0)	--	18.5	10.2	16.4	≈ ≡
25	9.2	3.5	3.8	(2.9)	--	18.9	10.9	16.3	≈ ≡ ≡
26	6.2	11.9	---	6.3	--	20.9	11.1	16.7	≈ ≡
27	6.0	12.5	---	5.3	--	21.9	13.3	20.2	≈ ≡
28	8.4	4.2	---	2.6	--	21.2	13.7	20.0	≈ ≡
29	10.0	---	---	3.7	--	21.5	13.7	20.0	≡
30	9.8	9.7	---	3.9	--	22.3	11.2	20.1	≡ ≡
31	9.8	4.3	0.0	4.0	--	22.0	15.2	20.2	≈ ≡
Avg	8.3	74.9	29.1	3.9	--	20.6	13.4	18.1	
N/Y	9.1	63.9	35.1	4.0	--	20.0	...	...
	Ttl	211.1							
A/M	7.8	%	4.3	Ttl	67.2	4.4	--	20.0	11.3 16.4
	Ttl	193.1							
N/Y	7.0	%	4.0	Ttl	70.2	4.9	--	19.4	9.9 ...

(TN: N/Y = Normal Year; A/M = Average for Month)

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Table 12. LOCAL WEATHER SUMMARY TABLE

Place	Name	Item	Temperature (°C)			Date	Rainfall (mm)			Avg (1000 hrs reading)	Pre- vail-	Avg Cloudy	Avg Clear	Avg Snow- fall	Hours	
			Avg	Aver-	Max		Total	Com-	Max Date							
			High	Low	age	peared	Daily	Amount	pared Daily							
						to Avg	Year	to Avg	High	Year						
Odomari	19.6	12.5	16.1	(+)	1.1	25.7	11	7.8	9	63.0	(-)	27.4	25.3	14	17.4	
Honto	19.9	14.4	17.2	(+)	1.1	24.9	16	10.0	1	95.5	(+)	7.4	40.3	14	18.0	
Maoka	20.2	13.9	17.0	(+)	1.3	25.8	15	8.1	9	58.1	(-)	32.2	16.3	14	18.1	
Ochiai	23.0	11.9	17.5	(+)	1.9	32.9	16	5.3	10	75.9	(-)	14.5	39.9	31	19.5	
Esutoru	19.4	13.5	16.5	(+)	1.5	26.6	15	8.8	9	44.9	(+)	15.8	4	17.2	SSW, SW	
Shikuka	18.5	11.0	14.7	(+)	1.0	33.1	15	4.6	10	40.2	(-)	49.9	9.5	21	15.9	
Ambetsu	20.7	11.9	16.3	(+)	1.3	27.2	16	6.8	9	67.2	(-)	3.0	24.5	20	16.9	
Nishinotoro	15.9	10.8	13.4	(-)	0.2	20.8	27	7.5	7	124.8	(+)	19.3	39.8	29	14.0	
Kaimajima	20.6	14.4	17.5	(+)	1.3	29.0	15	10.0	1	114.3	(+)	7.9	62.0	29	18.1	
Koni	21.7	11.2	16.5	(+)	1.2	24.5	17	8.1	3	46.5	(-)	50.5	15.0	14	16.9	
Konotoro	22.2	13.2	17.7	(+)	0.8	27.4	16	5.0	9	44.9	(-)	33.4	12.6	30	18.9	
Tomarii	22.1	13.0	17.6	(+)	1.2	29.0	16	19	8.2	10	36.3	(-)	28.0	8.2	30	19.1
Kushunai	17.9	12.6	16.3	(+)	1.6	24.5	29	7.0	11	40.8	(-)	18.9	16.0	31	16.2	
Chinnai	20.4	13.2	16.8	(+)	0.9	27.2	23	6.5	9	32.1	(-)	31.3	12.3	31	17.4	
Noyoshi	21.7	11.5	16.6	(+)	2.0	30.4	16	5.0	1	33.0	(-)	25.6	8.0	31	18.2	
Uryu	21.2	12.6	16.9	(+)	2.0	30.2	16	6.4	10	93.1	(-)	15.9	37.5	30	18.1	
Yaman	18.9	12.6	15.8	(+)	0.6	22.0	2729	8.5	8.9	109.4	(+)	35.7	41.8	15	16.6	
Tonnai	22.1	11.2	16.7	(+)	1.3	29.4	21	6.9	2	88.2	(+)	13.0	30.5	31	16.6	

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Table 12. (contd)

Kamikimai	21.8	12.1	17.0	(+)0.2	29.7	16	5.9	11	54.6	(-)15.1	15.1	14	18.5		20	1
Rutaka	21.6	12.5	17.0	(+)1.4	32.6	16	6.4	10	56.2	(-)25.9	26.0	29	18.5	E, SE	5	
Toyosakai	23.8	11.5	17.6	(+)1.2	31.0	15	4.5	12	65.0	(+)7.3	14.5	29	19.8	S	7.5	2
Osaka	24.0	12.5	18.2	(+)1.8	30.3	16	4.5	12	40.3	(-)37.8	8.3	29	20.9	S	7.6	4
Miho	23.6	11.5	17.6	(-)0.3	30.5	15	3.7	9	58.9	(+)5.4	16.4	31	20.1	W	6.6	8
Shiraura	21.5	10.9	16.2	(+)1.1	33.5	16	3.4	1	44.3	(-)41.3	27.5	31	18.1	S	6.8	7
Mototomari	20.7	11.9	16.3	(+)1.4	30.2	19	5.8	1	21.7	(-)53.6	17.0	1	17.7	S	6.4	5
Chidori	21.9	12.5	17.2	(+)2.4	31.7	16	6.6	1	•••	•••	•••	-17.8	W	5.6	10	
Noto	16.9	9.4	13.2	(-)0.4	19.7	27	3.3	7	23.3	(-)30.8	6.0	16	14.7	S, SW	8	11
Kamishikuka	23.5	10.3	16.9	(-)0.6	33.1	16	2.8	9	21.9	(-)60.3	5.3	21	20.0	S	6.4	3
Kiton	23.8	11.0	17.4	(+)1.7	32.0	28	5.0	7	29.5	(-)37.3	8.6	1	20.0	S	6.5	6
Kaibyojima	14.3	8.3	11.3	(+)1.8	19.7	26	4.8	5	5.3	•••	2.7	2	•••	7.0	•••	•••
Toyohara	23.0	12.5	17.8	(+)1.0	33.7	16	7.8	11	47.1	(-)28.5	14.8	21	19.1	SW	7.5	5
Kenuma	23.0	11.6	17.3	(+)1.0	32.6	16	4.2	7	47.2	(-)32.7	17.8	21	•••	•••	•••	•••
Kamiesutoru	22.6	11.3	17.0	•••	31.1	16	4.0	9	37.9	•••	8.4	21	•••	•••	•••	•••

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Table 12. LOCAL WEATHER SUMMARY TABLE (Contd)

Daily Weather

Item	Pre- cipi- tation ≥ 0.0mm	Pre- cipi- tation ≥ 0.1mm	Com- pared to Avg	Snow der	Thun- der	Mist storms	Gales	Earth- quakes
Place								
Name								
Odomari	17	10	(-)3	--	--	13	5	--
Honto	13	11	(-)3	--	--	2	2	--
Macka	15	12	(-)2	--	--	8	1	--
Ochiai	18	13	(+)3	--	1	12	2	--
Esutoru	13	12	..	--	1	11	3	--
Shikuka	18	13	(-)2	--	1	9	6	--
Ambetsu	17	13	0	--	2	17	3	--
Nishinotoro	14	10	(+)1	--	--	24	--	--
Kaimajima	12	11	(+)2	--	--	14	--	--
Koni	7	7	(-)9	--	--	5	--	--
Konotoro	14	10	(-)1	--	--	4	--	--
Tomarii	12	11	(+)2	--	1	3	--	--
Kushunnai	6	6	(-)5	--	--	1	--	--
Chinnai	8	7	(-)2	--	--	4	--	--
Noyoshi	10	10	(+)2	--	1	5	--	--
Uryu	7	7	(-)6	--	--	7	--	--
Yaman	10	8	(-)1	--	--	5	--	--
Tonnai	7	7	(-)1	--	1	15	1	--
Kamikiminai	12	9	(-)3	--	--	9	2	--
Rutaka	9	5	(-)6	--	--	--	--	--
Toyosakai	13	13	(+)1	--	1	1	--	--
Osaka	8	8	0	--	--	--	--	--
Miho	12	11	(+)3	--	1	--	--	--
Shiraura	14	14	(+)4	--	--	2	--	--
Mototomari	5	5	(-)5	--	1	1	--	--
Chidori	11	(11)	0	--	1	--	--	--
Noto	15	14	(+)6	--	2	4	1	--
Kamishikuka	17	11	(-)2	--	1	2	1	--
Kiton	5	5	(-)4	--	--	--	--	--
Kaibyojima	4	4	..	--	--	17	6	--
Toyohara	18	14	(+)1	--	--	4	--	--
Konuma	10	10	(-)1	--
Kamiesutoru	16	12	--

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Table 13. LOCAL WEATHER TABLE July 1939

Item- Place	Nishi- Name notoro	Kaima- jima	Koni Kono- toro	Toma- ri	Average Daily Temperatures (°C)					(1000 hours limit)								
					Chin- unnai	Nay- nai	Uryu	Yaman	Toon	Kami- nai	Ruta- nai	Kiminai	ka					
1	11.0	15.0	17.3	14.5	15.3	14.0	13.5	11.3	16.1	12.1	14.4	14.4	16.0	14.5	18.1	14.1	10.9	13.2
2	12.0	16.8	15.1	16.0	15.9	13.8	13.5	15.5	18.2	13.2	14.0	16.5	14.8	17.5	16.8	15.5	13.5	15.0
3	11.4	15.3	15.2	15.6	16.0	13.5	13.0	14.0	18.5	13.9	13.0	17.0	18.1	19.3	15.2	17.5	15.0	15.7
4	14.0	16.3	17.1	14.7	17.5	...	15.3	14.0	16.6	14.2	13.2	15.4	14.5	15.3	15.6	19.1	18.8	18.8
5	12.0	16.5	17.6	18.2	15.5	... 13.4	14.0	10.8	14.3	15.4	15.0	15.7	13.9	18.2	11.4	10.4	10.7	10.7
6	9.4	11.9	15.1	12.2	11.3	11.8	13.2	15.9	10.5	14.4	14.3	9.3	10.9	12.1	12.9	9.3	8.5	9.3
7	9.3	12.4	13.5	12.5	13.4	13.0	14.2	13.9	11.0	11.8	11.8	11.1	12.1	13.8	12.5	10.2	9.5	10.1
8	11.0	13.4	15.3	15.6	14.9	12.8	16.5	15.0	13.2	12.8	14.4	13.1	13.0	13.0	16.0	13.3	10.6	12.6
9	11.3	14.3	16.3	14.2	17.4	14.5	16.1	15.0	12.7	14.3	14.5	14.0	15.0	13.1	14.6	13.0	12.8	11.5
10	11.7	15.5	15.8	13.7	14.1	14.3	16.6	15.7	11.0	14.5	14.6	13.6	11.7	14.0	14.6	14.2	14.0	12.4
11	13.8	16.3	16.2	14.9	14.3	12.5	15.5	17.4	11.9	14.2	16.5	13.3	13.3	15.3	16.1	15.6	14.8	14.4
12	13.8	16.8	15.9	18.1	14.8	16.3	16.1	14.8	16.9	15.8	15.4	16.9	16.9	13.3	14.2	19.6	15.7	15.0
13	12.3	15.5	15.1	16.4	16.4	16.0	16.0	17.5	15.5	15.0	16.6	17.1	16.1	14.3	19.0	18.6	17.5	16.6
14	14.0	18.0	15.2	16.2	16.0	15.5	16.0	15.3	16.1	15.7	17.0	16.3	16.8	17.1	16.9	20.0	15.2	17.7
15	14.7	22.8	15.3	20.6	19.0	18.3	15.5	18.7	20.9	17.0	21.3	20.8	21.4	23.5	21.9	21.5	23.0	20.1
16	15.3	24.1	16.5	21.4	23.5	19.9	19.6	20.5	24.5	18.0	21.8	23.0	24.1	21.2	25.5	24.3	24.9	21.4
17	14.1	21.0	17.8	22.5	19.6	18.8	17.7	18.5	21.1	18.3	17.1	19.8	20.6	22.8	22.1	20.7	15.4	18.0
18	14.2	19.3	16.1	16.6	18.5	15.8	19.1	19.0	19.6	15.9	19.2	18.4	19.9	20.5	19.9	19.4	21.2	20.6
19	14.7	22.5	17.1	20.7	24.3	... 18.5	16.5	20.4	17.3	22.1	20.9	21.8	20.2	21.2	23.2	21.3	25.0	17.2
20	13.6	18.3	18.5	20.9	21.7	... 18.8	17.5	20.5	16.8	21.1	19.3	19.4	21.0	20.0	18.3	17.5	17.2	17.2

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Table 13 (Contd)

21	14.9	17.8	16.8	20.5	18.0	17.3	16.0	17.3	19.7	17.4	19.9	20.1	18.6	20.6	22.1	19.7	18.0	15.4
22	12.2	17.5	16.5	21.0	19.2	18.5	19.2	16.0	17.9	16.9	12.9	17.0	17.3	18.9	20.4	19.7	17.2	15.7
23	13.2	16.3	16.0	19.7	20.3	17.5	20.3	18.5	17.0	15.3	14.7	16.2	17.0	16.5	18.6	17.6	16.1	14.9
24	15.0	17.8	16.6	16.7	17.1	16.3	19.8	15.9	18.8	16.0	17.7	17.5	17.4	18.5	18.8	17.5	16.9	17.0
25	15.9	18.8	15.7	19.1	17.9	17.0	18.8	18.6	19.9	18.5	18.9	19.1	19.0	21.3	20.9	22.2	18.9	17.8
26	15.4	20.4	17.1	20.3	19.4	18.8	17.9	18.2	16.9	15.9	19.3	18.9	16.4	20.3	21.3	21.8	19.8	20.3
27	17.0	20.8	17.2	19.0	19.5	19.0	18.0	18.7	19.4	17.0	17.4	20.8	18.7	22.8	20.3	20.8	19.8	22.1
28	16.5	19.8	17.2	19.8	22.1	21.5	19.7	16.5	19.2	20.0	16.9	22.0	20.1	19.0	19.7	19.3	21.7	22.9
29	14.8	18.8	19.0	20.8	20.7	21.0	18.5	19.3	17.4	20.0	16.7	19.3	18.3	19.8	18.2	20.0	17.0	16.8
30	13.2	16.9	16.8	19.4	16.6	15.5	17.6	19.0	16.2	17.0	19.8	15.6	18.3	17.6	17.7	15.7	13.8	13.9
31	13.5	16.8	17.8	17.0	14.4	14.0	17.6	17.4	15.1	15.5	15.9	14.9	15.1	17.5	16.3	15.2	12.5	13.1
Monthly Average		13.4	17.5	16.5	17.7	17.6	16.3	16.8	16.6	16.9	15.8	16.7	17.0	17.6	18.2	17.6	16.2	16.3

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Table 13. LOCAL WEATHER TABLE (Contd)

Item Place Name	Chidori	Noto	Kami- shikuka	Kiton	Kaibyojima
Date					
1	14.0	10.9	12.6	14.5	10.2
2	19.4	11.0	14.1	11.5	9.1
3	16.9	12.3	16.1	15.3	9.0
4	16.6	13.8	17.9	16.8	12.2
5	10.1	11.8	12.2	15.8	8.3
6	9.8	12.1	12.5	12.8	7.2
7	9.9	8.9	11.7	11.5	7.4
8	13.9	10.0	13.3	14.3	8.3
9	17.1	11.2	11.6	14.8	10.2
10	15.8	12.1	14.0	14.3	10.7
11	15.3	11.0	15.0	14.3	12.7
12	14.8	10.3	16.2	17.0	12.5
13	18.5	12.0	17.8	20.0	13.3
14	19.0	15.4	18.2	17.5	13.3
15	23.0	16.6	21.1	20.5	13.1
16	23.1	15.8	24.1	23.9	12.6
17	19.5	12.0	20.2	21.0	10.4
18	19.4	13.6	17.8	19.8	13.4
19	25.6	12.4	23.9	22.0	13.4
20	16.6	13.3	16.0	16.3	12.2
21	15.9	15.3	17.5	15.8	10.5
22	16.5	12.7	17.5	18.0	10.4
23	17.1	15.1	18.9	19.0	12.1
24	14.8	14.2	13.4	15.5	11.7
25	19.3	15.5	18.4	18.3	14.6
26	19.5	15.2	16.6	19.8	16.3
27	21.9	16.6	20.9	20.8	13.0
28	22.5	17.4	22.1	22.8	14.7
29	18.7	16.2	20.3	21.8	11.0
30	14.6	12.8	16.8	17.0	8.6
31	13.8	11.4	14.5	17.8	8.8
Monthly Average	17.2	13.2	16.9	17.4	11.3

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Table 14. LOCAL WEATHER TABLE July 1939

Item Place Name	Date	Daily High Temperatures (°C) (1000 hours Limit)																
		Nishi- notoro	Kaima- jima	Koni- otoro	Kono- tora	Toma- ri	Kush- nai	Chin- nai	Kay- osni	Uryu- nai	Yaman- nai	Kami- nai	Kimbei- sakai	Shir- aura	Moto- tomari			
1	12.5	20.0	22.5	17.8	20.3	19.5	15.2	17.5	21.4	14.7	20.0	19.3	21.0	21.0	24.3	19.5	18.4	20.5
2	13.7	21.0	20.6	22.4	20.1	17.0	15.5	19.0	24.8	15.5	21.0	21.7	20.1	25.0	24.4	21.5	17.1	19.3
3	13.0	18.0	22.2	18.4	21.3	17.0	14.2	19.0	23.9	16.8	18.5	22.7	25.6	29.5	21.8	22.5	21.7	21.1
4	17.0	20.0	22.5	21.4	23.5	....	17.4	19.0	25.1	19.4	17.8	22.4	22.1	23.5	23.8	24.2	27.7	24.4
5	15.4	20.0	23.5	20.0	16.2	...	16.0	15.0	13.8	19.0	21.0	19.7	20.6	21.0	22.4	14.7	11.3	10.9
6	9.7	12.5	19.5	13.9	12.0	15.5	16.2	18.5	13.1	19.2	20.0	10.7	12.5	14.2	15.5	10.5	10.3	10.3
7	11.0	13.7	19.8	14.4	17.0	13.0	17.9	16.0	12.5	14.5	15.0	13.7	14.7	17.0	14.9	12.0	11.2	11.1
8	13.0	15.8	21.6	20.5	19.0	16.5	22.9	20.0	16.7	17.0	20.3	17.9	16.5	21.0	21.4	18.0	13.7	15.9
9	13.0	17.2	23.0	23.4	22.6	20.0	23.7	23.0	18.0	20.0	21.4	20.3	19.3	21.1	22.3	22.2	17.9	16.6
10	13.4	18.5	22.5	21.0	20.0	21.5	20.5	24.4	15.6	19.0	21.4	20.4	17.0	23.0	23.2	23.6	21.5	17.8
11	17.5	20.5	22.0	21.0	20.0	18.0	18.0	24.2	16.6	17.8	22.5	20.7	19.6	23.9	22.7	25.5	20.3	18.3
12	15.9	19.5	20.6	20.6	20.0	18.0	17.9	18.0	21.1	19.0	18.2	22.6	21.1	22.0	23.6	24.0	19.1	16.5
13	16.4	17.5	20.0	19.0	19.3	18.5	18.5	22.0	16.7	19.0	21.4	21.8	18.9	23.5	24.1	24.2	22.0	21.8
14	16.5	24.5	21.0	18.8	20.7	18.5	17.2	19.0	23.0	19.3	21.5	20.7	21.7	22.0	21.3	29.4	20.1	22.3
15	16.4	29.0	21.0	24.5	26.7	21.0	19.9	23.8	27.2	19.0	27.0	26.1	28.1	31.0	29.2	30.5	32.3	26.1
16	18.0	28.7	22.0	27.4	29.0	23.8	23.2	30.4	30.2	20.2	29.3	29.7	30.4	30.3	29.5	33.5	29.9	25.7
17	18.8	23.5	24.5	27.3	24.0	22.0	24.7	23.0	22.8	21.0	23.0	22.3	22.6	28.1	27.4	28.3	20.1	25.7

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Table 14. (Contd.)

	Montly	Average
1	19.0	24.0
2	18.0	25.5
3	16.9	22.5
4	18.5	22.5
5	13.9	19.0
6	15.2	18.0
7	17.6	20.5
8	17.8	21.5
9	20.1	25.7
10	20.8	21.0
11	18.9	21.0
12	17.2	19.5
13	13.8	17.0
14	15.5	17.5
15	15.9	20.6
16	17.9	21.7
17	22.1	22.2
18	20.4	21.7
19	17.1	22.1
20	18.9	22.1
21	21.2	21.8
22	21.6	21.8
23	20.3	21.5
24	20.0	21.4
25	18.5	20.3
26	23.0	24.9
27	24.0	26.3
28	26.0	28.2
29	22.0	23.0
30	18.1	23.5
31	15.0	19.1
32	17.0	21.0
33	19.1	21.5
34	21.8	21.5
35	15.7	15.5
36	15.0	15.5
37	17.0	17.0
38	18.1	18.1
39	24.5	24.5
40	21.9	21.9
41	22.0	23.0
42	26.0	26.0
43	24.0	24.0
44	23.5	23.5
45	22.2	22.2
46	22.0	22.0
47	21.5	21.5
48	21.0	21.0
49	22.0	22.0
50	23.0	23.0
51	21.0	21.0
52	23.5	23.5
53	22.0	22.0
54	21.0	21.0
55	21.0	21.0
56	21.0	21.0
57	21.0	21.0
58	21.0	21.0
59	21.0	21.0
60	21.0	21.0
61	21.0	21.0
62	21.0	21.0
63	21.0	21.0
64	21.0	21.0
65	21.0	21.0
66	21.0	21.0
67	21.0	21.0
68	21.0	21.0
69	21.0	21.0
70	21.0	21.0
71	21.0	21.0
72	21.0	21.0
73	21.0	21.0
74	21.0	21.0
75	21.0	21.0
76	21.0	21.0
77	21.0	21.0
78	21.0	21.0
79	21.0	21.0
80	21.0	21.0
81	21.0	21.0
82	21.0	21.0
83	21.0	21.0
84	21.0	21.0
85	21.0	21.0
86	21.0	21.0
87	21.0	21.0
88	21.0	21.0
89	21.0	21.0
90	21.0	21.0
91	21.0	21.0
92	21.0	21.0
93	21.0	21.0
94	21.0	21.0
95	21.0	21.0
96	21.0	21.0
97	21.0	21.0
98	21.0	21.0
99	21.0	21.0
100	21.0	21.0

Montly Average 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Montly Average 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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Table 14. LOCAL WEATHER TABLE (Contd)

Item	Daily High Temperatures (°C) (1000 hours limit)				
Place	Chidori	Noto	Kami-	Kiton	Kaibyojima
Name			shikuka		
Date					
1	21.4	13.8	20.9	21.0	12.8
2	22.7	13.0	16.5	15.5	12.0
3	23.7	15.6	21.8	20.5	11.5
4	21.2	17.6	25.3	23.0	14.6
5	10.3	14.5	13.8	17.5	11.7
6	12.2	15.6	16.7	18.0	9.5
7	11.3	14.5	17.4	18.0	9.3
8	19.0	15.0	18.2	20.0	11.4
9	19.0	15.6	20.4	21.5	13.6
10	19.5	17.6	24.9	24.5	14.8
11	19.0	16.3	23.0	22.5	14.6
12	19.5	16.0	23.1	22.5	15.6
13	25.0	18.1	25.8	28.5	17.7
14	25.0	18.5	28.2	28.0	15.6
15	28.9	19.6	27.0	26.5	14.6
16	31.7	19.5	33.1	31.7	17.1
17	27.3	18.0	26.8	26.0	14.1
18	27.4	17.0	28.0	29.0	16.1
19	30.9	17.5	29.2	28.5	18.1
20	18.7	16.6	20.8	20.5	16.6
21	20.9	17.5	23.3	19.5	13.3
22	21.5	17.5	27.0	26.5	15.5
23	20.2	18.2	24.0	26.0	15.7
24	18.3	18.5	19.1	19.5	13.8
25	25.5	18.5	24.0	23.0	17.9
26	27.3	19.1	25.2	28.0	19.7
27	29.5	19.2	31.0	29.0	16.8
28	31.4	19.2	29.0	32.0	16.4
29	20.8	19.0	27.5	30.0	14.0
30	15.4	15.0	19.5	21.5	9.4
31	15.2	12.7	16.5	20.0	9.9
Monthly Average	21.9	16.9	23.5	23.8	14.2

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Table 15. LOCAL WEATHER TABLE

Item Place Name	Date	Daily Low Temperatures (°C)												(1000 Hours Limit), Kami- sakai						Moto- aura			
		Nishi- Kaima-	Koni	Kono- totoro	Toma- ri	Kush- unmai	Chin- nai	Nay- nai	Uryu	Yaman	Ton- nai	Shir- sakai	Toyo-	Osaka	Miho	Shir-	Moto-	aura	tomari				
1	9.4	10.0	12.0	11.2	10.2	8.5	11.8	5.0	10.7	9.5	8.7	9.4	10.9	8.0	10.9	8.6	3.4	5.8					
2	10.2	12.5	9.6	9.6	11.7	10.5	11.5	12.0	11.5	10.8	6.9	11.3	9.5	10.0	9.1	9.4	9.8	10.6					
3	9.7	12.5	8.1	12.7	10.7	10.0	11.8	9.0	13.0	11.0	7.5	11.3	10.5	10.0	8.6	12.5	8.3	10.3					
4	11.0	12.5	11.6	7.9	11.5	9.5	13.2	9.0	8.0	9.0	8.5	8.3	8.6	5.5	6.8	7.0	10.5	13.2					
5	8.6	13.0	11.7	16.3	14.8	10.8	13.0	7.8	9.5	9.7	10.3	10.7	6.8	13.9	8.0	9.5	10.5						
6	9.0	11.2	10.7	10.5	9.5	8.0	10.2	13.2	7.9	9.5	8.5	7.8	9.2	10.0	10.3	8.0	6.6	8.2					
7	7.5	11.0	7.2	10.5	9.7	8.0	10.5	11.7	9.5	9.0	8.5	8.5	9.5	10.5	11.0	8.4	7.7	9.0					
8	8.9	11.0	8.9	10.6	10.7	9.0	10.0	10.0	9.7	8.5	8.5	8.3	9.4	5.0	10.5	8.5	7.5	9.3					
9	9.5	11.5	9.6	5.0	12.1	9.0	8.5	7.0	7.4	8.5	7.5	7.7	10.6	5.0	6.8	3.7	7.6	6.3					
10	10.0	12.5	9.1	6.3	8.2	7.0	12.6	7.0	6.4	10.0	7.8	6.8	6.4	4.9	5.9	4.8	6.5	6.9					
11	10.1	12.0	10.3	8.7	8.5	7.0	13.0	10.5	7.2	10.5	10.4	5.9	7.0	7.0	9.5	5.6	9.2	10.4					
12	11.7	14.0	11.1	15.5	9.5	14.5	14.2	11.6	12.6	12.6	12.6	11.1	12.7	4.5	4.5	15.2	12.2	11.5					
13	8.1	13.5	10.1	13.7	13.5	13.5	13.0	14.2	11.0	11.8	12.4	13.3	5.0	13.9	13.0	13.0	11.4						
14	11.4	11.5	9.3	13.6	11.2	12.5	14.7	11.5	9.2	12.0	12.4	11.8	12.1	12.5	10.5	10.2	13.0						
15	12.9	16.5	9.6	16.6	11.2	15.5	11.0	13.5	14.6	15.0	15.5	15.4	14.6	14.6	16.0	14.6	12.5	13.7	14.0				
16	12.5	19.5	11.0	15.4	18.0	16.0	16.0	10.5	18.8	15.7	14.3	16.2	15.5	12.4	20.8	19.0	16.3	12.9					
17	9.3	18.5	11.1	17.7	15.1	15.5	10.7	14.0	19.4	15.5	11.2	17.2	18.5	17.5	16.8	13.0	10.7	10.2					
18	9.4	14.5	11.1	9.3	10.7	11.0	16.6	13.0	12.5	12.0	11.6	12.5	13.2	12.3	10.0	10.5	11.3	12.6					

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Table 15. (Contd.)

19	11.4	19.5	12.1	15.1	19.6	17.0	14.3	9.5	13.8	15.0	16.6	14.7	12.9	11.4	12.7	17.6	11.3	19.7
20	10.3	16.0	15.0	15.6	19.0	15.0	15.0	14.4	15.0	14.0	13.1	14.3	16.2	15.4	15.5	11.4	11.4	13.9
21	11.3	13.0	12.1	16.5	11.5	14.0	14.3	14.5	12.7	14.5	10.4	13.7	13.7	14.1	15.5	12.2	11.5	11.6
22	10.5	16.9	10.5	15.1	14.3	15.0	15.2	10.0	14.6	14.5	9.7	12.6	13.8	15.0	15.2	13.3	11.6	11.8
23	11.1	14.5	10.1	14.4	14.1	14.5	13.4	14.5	14.0	12.5	11.9	12.0	13.5	12.5	13.7	13.1	12.7	12.0
24	12.3	15.0	11.6	12.4	14.1	13.0	16.0	11.0	13.8	13.0	11.8	12.3	13.3	14.0	14.5	11.7	13.3	11.5
25	13.9	16.0	9.6	16.6	15.5	15.5	14.8	13.5	15.4	17.0	13.3	13.8	15.0	15.9	16.9	16.2	13.5	12.9
26	10.6	15.0	12.1	15.1	12.8	14.5	12.7	11.5	14.4	11.6	13.5	11.9	13.5	16.5	14.9	14.6	13.5	12.9
27	13.2	15.5	11.6	11.1	12.7	14.0	12.5	12.4	15.0	12.0	12.3	15.0	13.8	16.5	11.1	11.4	12.5	15.4
28	14.0	18.5	13.8	16.6	18.2	19.5	17.1	11.0	15.4	18.6	13.3	17.5	15.5	17.0	16.7	14.9	13.9	19.2
29	12.3	18.0	16.0	18.6	15.4	17.5	15.0	15.5	16.0	18.0	12.3	17.2	15.0	18.1	13.5	6.2	15.6	15.2
30	12.6	16.8	16.5	15.3	15.0	14.0	15.0	13.0	15.6	16.0	14.5	14.6	15.0	16.3	16.1	14.2	12.6	13.4
31	11.4	16.0	14.0	14.9	13.2	13.0	13.4	13.2	14.5	14.5	13.8	13.0	13.6	13.1	14.8	13.2	11.5	12.5

Monthly
Average

11.9 11.6 10.9 11.5 12.5 12.1 11.5 11.2 11.5 12.6 13.2 13.0 12.6 11.2 11.5 11.2 11.9

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Table 15. LOCAL WEATHER TABLE (Contd)

Item Place Name	Chidori	Noto	Kami- shikuka	Kiton	Kaibyojima
Date					
1	6.6	8.0	4.3	8.0	7.5
2	16.0	9.9	11.6	7.5	6.2
3	10.1	9.0	10.4	10.0	6.5
4	11.9	10.0	10.5	10.5	9.8
5	9.8	9.1	10.6	14.0	4.8
6	7.4	8.6	8.2	7.5	4.9
7	8.5	3.3	6.0	5.0	5.4
8	8.7	5.0	8.4	8.5	5.1
9	15.2	6.8	2.8	8.0	6.7
10	14.0	6.6	3.1	4.0	6.5
11	11.5	5.6	6.9	6.0	10.8
12	10.0	4.5	9.2	11.5	9.3
13	12.0	5.9	9.8	11.5	8.9
14	13.0	12.2	8.2	7.0	10.9
15	17.0	13.5	15.2	14.5	11.6
16	14.4	12.1	15.0	16.0	8.0
17	11.6	6.0	13.5	16.0	6.7
18	11.3	10.1	7.6	10.5	10.7
19	20.2	7.2	18.5	15.5	8.6
20	14.4	10.0	11.1	12.0	7.8
21	10.9	13.0	11.7	12.0	7.7
22	11.4	7.8	8.0	9.5	5.2
23	14.0	12.0	13.8	12.0	8.5
24	11.3	9.9	7.6	11.5	9.6
25	13.0	12.5	12.7	13.5	11.2
26	11.7	11.3	8.0	11.5	12.9
27	14.3	13.5	10.7	12.5	9.1
28	13.5	15.5	15.1	13.5	13.0
29	16.5	13.3	13.0	13.5	8.0
30	13.7	10.6	14.0	12.5	7.7
31	12.3	10.0	12.5	15.5	7.7
Monthly Average	12.5	9.4	10.3	11.0	8.3

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Table 16. LOCAL WEATHER TABLE July 1939

Date	Item	Place	Name	mari	Precipitation (mm) (1000 hours)										Ton-						
					Oda-	Honto	Maoka	Ochiai	Esu-	Chi-	Ambet-	Nishi-	Kaima-	Kono-	Toma-	Chin-	Nay-	Uryu	Yaman-	Ton-	
					tori	kuka	su	notoro	jima	riro	toro	nai	nai	nai	oshi	nai	ton-				
1					0.0	---	0.2	0.8	1.5	2.1	14.5	---	---	0.0	2.2	---	1.2	2.3	---	1.1	1.5
2					---	---	0.7	---	3.4	9.8	---	---	0.3	3.2	---	0.6	4.0	---	---	---	---
3					0.0	2.2	0.0	0.0	0.0	0.0	0.0	---	---	---	---	---	---	---	---	---	---
4					0.0	---	0.1	---	15.8	2.9	1.0	8.0	0.0	---	0.0	---	---	2.3	---	---	0.0
5					---	---	1.7	4.9	2.4	0.6	2.2	3.0	---	---	---	1.6	---	0.0	---	0.0	
6					7.6	10.1	6.7	0.5	---	---	---	11.8	9.4	10.0	5.0	3.4	12.0	9.8	---	12.0	13.4
7					1.2	8.6	6.8	0.3	---	---	---	6.6	7.6	4.0	1.5	4.2	4.0	---	7.9	0.3	---
8					---	---	0.0	0.1	---	---	0.0	2.1	---	---	---	1.1	---	---	---	---	---
9					---	---	---	---	---	---	---	0.0	---	---	---	---	---	---	---	---	---
10					---	---	---	---	---	---	0.0	---	---	---	---	---	---	---	---	---	---
11					---	---	0.4	0.2	---	0.0	0.1	0.0	---	---	---	---	---	---	---	---	---
12					0.0	0.3	1.2	9.1	0.2	0.0	0.2	---	---	1.0	2.2	---	0.1	---	---	0.1	1.0
13					0.0	0.0	0.0	0.0	---	---	---	0.7	5.0	0.0	---	---	---	---	---	---	---
14					25.3	40.3	16.3	2.9	---	0.6	0.0	25.6	17.0	15.0	12.4	4.0	---	5.1	---	18.2	---
15					---	---	0.0	0.0	3.8	0.4	3.5	---	---	---	---	---	---	2.0	---	41.8	10.0
16					---	---	---	---	1.0	2.8	2.8	---	---	---	---	---	5.4	---	---	---	---
17					---	---	---	---	0.0	---	0.0	---	---	---	---	---	---	---	---	---	---

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Table 16. (Contd.)

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Table 16. LOCAL WEATHER TABLE July 1939 (Contd)

Date	Item Place Name	Precipitation (mm) (1000 hours)										Kaibyo Toyohara Kanuma Kaniesutoru
		Kanuki- Rutaka	Toyo- Osaka	Miho	Shir- aura	Moto-	Chidori	Noto	Kiton	Kaibyo	Toyohara	
	sakai	minai	sakai	aura	tomari	chikuka	Jima					
1		0.0	—	—	—	3.4	0.8	0.4	—	5.0	1.4	8.6
2		—	—	—	—	0.4	—	—	—	1.7	6.9	2.7
3		—	—	0.0	—	—	—	—	—	0.1	—	—
4		—	—	0.0	0.3	—	0.1	1.7	(...)	0.8	3.8	—
5		—	—	0.0	—	0.7	0.8	—	(...)	—	2.5	3.4
6		0.9	3.5	4.5	2.8	4.1	4.1	—	(...)	0.1	0.0	—
7		0.3	1.7	5.8	7.2	0.4	3.2	—	(...)	—	—	—
8		—	—	—	—	—	—	—	—	—	—	—
9		—	—	—	—	—	—	—	—	—	—	—
10		—	—	—	—	—	—	—	—	0.3	—	—
11		—	—	—	—	—	0.4	—	(...)	—	—	—
12		0.7	—	0.2	—	11.2	0.5	—	(...)	—	—	—
13		—	—	—	—	4.2	0.5	—	—	—	—	—
14		—	—	—	—	—	—	—	—	0.2	0.0	—
15		15.1	13.0	12.0	6.8	4.2	0.5	—	—	0.2	0.0	6.0
16		—	—	9.9	5.7	—	—	—	—	0.2	0.6	9.3
17		—	—	—	—	—	—	—	—	6.0	0.6	3.0
		—	—	—	—	—	—	—	—	—	—	0.1

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Table 16. (Contd.)

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Table 17. LOCAL WEATHER TABLE July 1939

(Railroad Office and Central Research Office Surveys)

Place Name	Avg Pres- sure (at sea level) (mm)	Avg Temp- erature (°C)	Avg High Low	Humid- ity (%)	Vapor Ten- sion (mm)	Average Veloci- ty m/sec	Maximum Velocity m/sec	Direction	Sky Cover (0-10) (mm)	Precipi- tation (mm)	Evap- oration (from a box) (mm)	Snow hours (cm)
760 +	760 +	52.1	15.7	21.2	10.6	82	11.3	3.3	6.1	SSW	4.3	—
1	52.0	17.2	25.3	11.0	84	12.2	2.0	3.7	SW	5.3	—	2.3
2	53.9	18.5	26.0	11.5	79	11.7	3.8	6.8	SW	3.3	—	2.8
3	54.9	19.6	22.7	10.2	82	12.1	3.1	5.2	WSW	9.7	0.1	3.5
4	58.3	13.7	28.5	9.8	90	9.9	3.8	7.8	NNE	10.0	0.0	(2.4)
5											1.7	—
6	59.2	10.4	11.9	8.0	91	8.5	5.5	6.7	NNE	10.0	—	(0.7)
7	56.4	10.5	12.2	8.5	92	8.7	5.1	7.5	NNE	10.0	0.8	(1.3)
8	57.2	12.9	17.0	8.5	84	9.3	3.6	5.3	NE	10.0	—	2.2
9	57.4	14.0	23.0	8.2	71	7.8	3.4	6.3	SW	1.0	—	4.8
10	56.4	15.8	22.7	8.0	77	9.6	2.8	6.1	WSW	5.0	—	3.6
11	52.8	15.1	21.4	7.8	82	10.7	2.9	5.0	WSW	6.0	—	(2.6)
12	50.0	18.3	24.5	12.0	86	13.1	2.0	4.7	NE	9.3	0.4	(2.1)
13	51.6	16.9	23.4	12.4	84	12.1	2.5	4.6	WSW	8.0	0.7	(1.9)

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Table 17. (Contd)

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Table 17. LOCAL WEATHER TABLE July 1939 (Contd.)

Place Name	Item	* Konuma				* Kamisutoru			
		Temperature (°C) (1000-1000 hours)	Humid- ity (1000 hours)	Hours of preci- pitation (1000- hours)	Snow (1000 hours) (cm)	Temperature (°C) (1000-1000 hours)	Humid- ity (1000 hours)	Sun- shine (1000- hours)	Snow (1000- hours) (cm)
High	Low	Average hours	% (Jordan hours Method)	High	Low	Average hours	% (Jordan hours Method)	High	Snow (1000- hours) (cm)
Date									
1	21.5	5.4	13.5	69	1.5	—	17.6	5.5	11.6
2	24.0	6.3	15.2	90	6.9	—	19.0	12.2	15.6
3	25.0	10.5	17.8	51	7.1	—	18.5	7.5	13.0
4	22.5	9.2	15.9	64	5.3	—	18.8	8.0	13.4
5	16.0	11.0	13.5	.83	3.5	—	17.7	12.0	14.9
6	11.0	8.2	9.6	86	—	0.2	18.2	11.6	14.9
7	15.6	4.2	8.9	.92	—	0.3	12.0	11.0	11.5
8	20.2	8.7	14.5	.77	—	—	22.5	9.0	15.8
9	23.4	8.5	16.0	.96	3.9	—	25.5	4.0	14.8
10	22.0	5.2	13.6	.40	10.1	—	25.5	4.1	15.0
11	23.4	6.4	14.9	.69	8.3	—	25.2	10.4	16.8
12	24.0	12.2	18.1	.66	1.0	—	20.4	13.3	16.9
13	22.8	12.4	17.6	.83	6.6	—	23.4	13.5	18.5

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Table 17. (Contd)

	14	23.4	12.5	18.0	78	5.4	9.3	—	—	20.8	13.0	16.9	89	2.1	—
	15	26.0	15.4	20.7	82	0.9	—	—	—	23.4	13.1	18.3	86	4.8	3.0
16	32.6	16.0	24.3	68	4.6	—	—	—	—	31.1	12.0	21.6	99	7.3	0.1
17	26.2	15.2	20.7	74	7.7	—	—	—	—	24.3	14.9	19.6	72	12.2	—
18	26.4	12.6	19.5	64	8.1	—	—	—	—	26.1	7.2	16.7	76	9.1	5.4
19	32.0	15.5	23.8	68	6.9	—	—	—	—	24.5	12.1	18.3	100	4.1	0.4
20	26.0	13.2	19.6	64	4.3	—	—	—	—	24.9	13.0	19.0	63	5.5	4.5
21	28.9	14.1	21.5	73	4.1	17.8	—	—	—	18.5	11.0	14.8	94	—	—
22	24.2	12.9	18.6	73	6.0	0.5	—	—	—	24.5	11.6	18.1	98	9.8	—
23	20.8	13.3	17.1	69	4.4	—	—	—	—	27.1	13.9	20.5	52	3.5	—
24	22.5	12.5	17.5	83	0.6	2.0	—	—	—	20.4	9.6	15.0	70	4.8	—
25	25.2	15.1	20.2	70	1.0	—	—	—	—	22.4	13.6	18.0	95	3.5	—
26	25.4	14.7	20.1	73	5.3	—	—	—	—	26.3	13.3	19.8	63	12.3	—
27	24.4	15.4	19.9	83	5.2	—	—	—	—	28.2	12.0	20.1	51	12.5	—
28	23.4	12.1	17.8	81	2.0	—	—	—	—	26.1	17.8	22.0	66	7.1	—
29	20.1	13.1	16.6	87	0.7	2.5	—	—	—	24.2	11.5	17.9	80	3.5	—
30	20.4	14.4	17.4	81	—	6.5	—	—	—	22.7	13.3	18.0	57	1.1	—
31	15.5	13.7	14.6	87	—	7.0	—	—	—	19.2	15.7	17.5	57	0.0	—
Monthly Average	23.0	11.6	17.3	—	Ttl 121.4	—	—	—	—	Ttl 176.6	—	—	—	—	—
Average Year	21.8	10.8	16.3	—	% 75	—	—	—	—	% 36	—	—	Total 37.9	—	—
					Ttl 150.9	—	—	—	—	—	—	—	—	—	—
					% 32	Ttl 79.9	—	—	—	—	—	—	—	—	—

* Central Research Office Survey

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WEATHER SUMMARY

The majority of the low pressures passed through the northern section of the island causing various complications in the early part of August. From the 15th to the 17th a hurricane approached the vicinity of Sakhalin by a devious course and decreased its force moving northward along the coastal provinces from the Tartary Straits. Maximum wind velocity was recorded on the 16th and this hurricane originating at Odomari was probably due to a low pressure occurring from the 10th to the 11th. The southern section of the western coast was calm in comparison to normal years, but other sections showed an increase in the number of stormy days. As a result of the changes from low to high pressures, the number of cloudy days decreased and except in Ambetsu there were many sunny days. Due to southerly winds, a high of 0.5° (sic) was recorded except at Shikuka (TN: Probably 0.5° above normal average). A decrease in precipitation was observed at Honto and in the northern section of the west coast, especially at Ambetsu; but other sections showed an increase. An unusually large increase was recorded at Ochiai, double that of normal years. Seasonal fogs predominated and the number of days of fog increased.

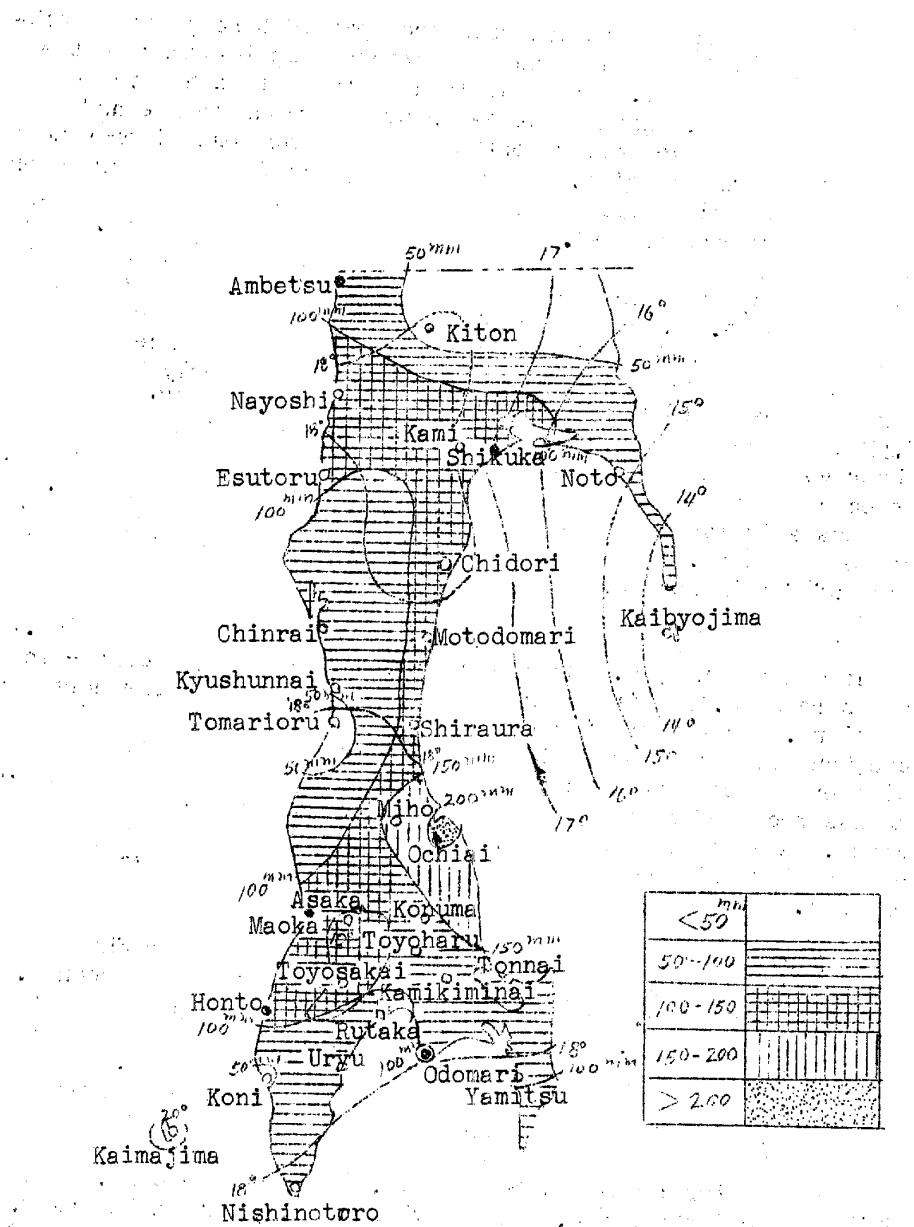
Pressure: Average pressures observed ranged between 757.7 mm at Ochiai and 756.7 mm at Ambetsu. There was a decrease in pressure of 0.1 mm from normal years, and 0.5 mm in the northern sections. There were increases in pressure of 0.2 mm at Honto and Ochiai, while Maoka did not vary from normal years. When high pressures developed in the Sakhalin area a maximum of 756.4 mm was recorded on the 9th at Odomari and along the western coast. A minimum low of 744.2 mm was recorded in Shikuka at noon on the 11th when a low occurred in the eastern sea area of Okha.

Wind: Prevailing winds were south at Ochiai and Shikuka, and SSW in other sections. Average velocity ranged between 4.1 m at Odomari and 2.8 m at Honto. Compared to normal years, there were decreases of 0.8 m at Honto and 0.3 m at Maoka, but increases of 0.4 m were observed at Ambetsu and 0.9 m at Shikuka. Maximum high of 17.8 m was reached on the 16th blowing NE at Odomari when the hurricane crossed inner Hokkaido.

Temperature: Ranged between 18.8° at Honto and 16.3° at Shikuka. Shikuka was 0.4° lower than normal, but Maoka was 0.4° and Ambetsu 0.8° higher than normal. During the first part of the month the southern part of the west coast was 0.2° and Ambetsu 0.8° above normal, but other sections were generally 0.4° below normal. For mid-August Ambetsu was 0.6° above normal, and other sections had increases ranging from 0.2° at Shikuka to 1.0° at Honto. At the end of the month the island temperatures were above normal ranging between 1.2° at Ambetsu and 2.9° at Ochiai. Maximum high was 32.3° at Shiraura on the 5th, Chidori was next with 30.6° on the 4th. Minimum low was 3.5° on the 15th at Konotaro and Kiton was next with 4.0° on the 14th.

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Insolation: Duration ranged between 213.7 hours (49%) at Maoka and 160 hours (36%) at Ambetsu, a decrease from normal of 11.3 hours (3%) for Ambetsu, and there was an increase of 20 hours (4%) at Odomari and 41.6 hours (10%) at Maoka. In early August there was a decrease of 8 hours at Odomari and 9 hours at Ambetsu and an increase of 3.6 hours at Shikuka and 20.2 hours at Maoka. In mid-August Ochiai was normal but there was a decrease of 8 hours at Ambetsu. Elsewhere there was a 1.3-hour increase at Shikuka and 11.1 hours at Honto. In late August there was a general increase of 6.3 hours at Ambetsu and 29.7 hours at Ochiai.

Humidity: Average ranged between 89% at Shikuka and 82% at Ambetsu. Odomari and Ochiai were normal, but there was a decrease of 3% at Ambetsu. Elsewhere there was an increase of about 2%. Minimum was 41% at Ochiai on the 28th, 42% at Maoka on the 15th and Ambetsu on the 16th.

Precipitation: Amount ranged from 217.6 mm at Ochiai to 76.1 mm at Ambetsu. There was a decrease from normal 11.3 mm at Honto, 8.5 mm at Shikuka and 32.6 mm Ambetsu. There was an increase of 19.5 mm at Odomari, 6.4 mm at Maoka and 110.6 mm (double normal) at Ochiai. In early August there was a decrease of 8.2 mm at Ambetsu, an increase of 13.3 mm at Shikuka and 86.0 mm at Ochiai. In mid-August there was a decrease of 10.10 mm at Honto and 26.6 mm at Ambetsu on the western coast, but there was an increase of 50.0 mm at Ochiai and 4 to 5 mm at Shikuka and Odomari. In late August there was an increase of 2.2 mm at Ambetsu and decreases of 2.5 mm at Maoka and 29.5 mm at Ochiai. The maximum of 69.9 mm was at Ochiai on the 16th followed by 45.4 mm at Esutoru on the 6th.

Weather: The number of cloudy days ranged between 20 days at Ambetsu and 12 days at Ochiai. This was normal for Odomari but there were increases of 1 day at Maoka and 5 days at Ambetsu, and decreases of 3 to 4 days at Honto Shikuka and Ochiai. Precipitation ranged between 20 days at Ambetsu and 11 days at Odomari and Honto. This was a decrease of 1 day at Odomari and Shikuka, and 3 days at Honto. There was an increase of 1 day at Maoka and Ochiai and 5 days at Ambetsu. There were no stormy days at Honto but the average for other sections was between 7 days at Odomari and Shikuka and 2 days at Maoka, a decrease from normal of 1 day for Maoka, 2 days for Honto, and an increase of 6 days for Shikuka, and 3 days for other sections.

Storms: The outstanding low pressures observed were as follows.

Low pressure of 10th-11th. On the 9th a low of 754 mm originated in the northwestern section of Manchuria, moved eastward and was observed in western Nikolayevsk at noon on the 10th with a reading of 748 mm. By evening the reading in the Nikolayevsk area was 744 mm. A low of 738 mm developed offshore northeast of Okha on the morning of the 11th, but its progress diminished and it was observed as 742 mm at sea east of Okha. The same low continued in the central Okhotsk Sea on the morning

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of the 12th; by evening it had moved to northwest of Samushiro and entered the Kamchatka Peninsula. The southern part of Sakhalin was mostly clear on the morning of the 10th. Cloudiness prevailed in the northern part; by noon it had started to rain in Shikuka and Ambetsu and there was a prevailing south wind throughout the island and it became rainy and cloudy. The south wind accompanying the low pressure became increasingly strong toward evening. On the 11th the wind started quite strongly and though there were clouds and rain they subsided gradually and the wind diminished.

Table 1.

Place	Min Low	Date/Time	Max Wind	Wind Direc-	Date/Time	Precipi-
				tion		tation
					(10th-11th)	
Odomari	748.7	11/1400	10.4	m	SSW	10/2100 0 mm
Honto	749.7	11/1300	9.8	m	SSW	10/2100 ---
Macka	749.0	11/1200	10.6	m	SSW	10/2200 5
Ochiai	747.6	11/1200	12.4	m	S	10/1900 0
Esutoru	745.6	11/1100	13.2	m	SSW	10/2200 3
Shikuka	744.2	11/1200	14.9	m	SSW	10/1700 0
Ambetsu	744.6	11/0700	12.1	m	SSW	10/2100 7

NOTE: On the 21st at 2100 hours when the low pressure hit Kamchatka there was a local storm at Esutoru with a north wind of 46.2 meters.

Hurricane of the 15th-17th: The hurricane of the southern sea area off the coast of Minamitorii Jima gradually advanced northward and came within 1100 km of Hachijojima by the evening of the 14th and registered 740 mm or less. It followed a NW course and approached Japan proper where a sudden low developed. A low of 725 mm was observed at sea east of Kinkaizan in the evening of the 15th. Leading toward Hokkaido, by evening its center was located within 160 km offshore southeast of Nemuro. At 0900 hours on the 16th it appeared over Nemuro and diminished with a reading of 740 or less. Advancing NW by NNW it was recorded at 742 mm in the Tokatsu Plains at noon, after which the low split in two, one part heading between Sapporo and Asahigawa, the other being observed at 744 mm. By noon they had again coalesced and appeared at sea WNW of Hamuro with a reading of 750 mm. This low headed northward and was observed 80 km west of Tsugaru Straits by evening, still on a northerly course. On the morning of the 19th it appeared at sea west of Macka and reached the coastal area across from Esutoru with a reading of 754 mm. From there it advanced northward and by evening it had diminished to a reading of 758 mm; it disappeared north of the Lower Amur River on the morning of the 19th (sic).

For these reasons pressures of the southern part of Sakhalin gradually reduced on the morning of the 15th. Although

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there were clouds at Odomari and Ochiai, elsewhere the weather was clear and winds were mild, a 10-metre wind being recorded only at Odomari. In the evening mild winds and cloudiness prevailed in sections other than Odomari, but by morning there was rain at Odomari and Ochiai and gradually winds developed over the entire southern part, turning into rain during the afternoon, and cloudiness prevailed in sections other than Ochiai and Shikuka. Hence the weather was unsettled and in the southern sections maximum wind velocity generally occurred in the morning; a NE wind of 17.8 meters was recorded at Odomari at 0900 hours. On the same day rain was carried gradually to the north but the wind was mild because of diminishing low pressures. There was rain throughout the island on the next day, but the weather turned to fair.

Due to the storm on the 16th, barge communications were hindered but there was no other damage recorded.

Table 2A

Place	Min Low	Date/Time	Max Wind	Wind	Date/Time	Precipi-
				Direc-		tation
				tion		(16th-19th
						Total)
Odomari	750.2 mm	16/1400	17.8 m	NE	16/0900	39 mm
Honto	750.1	16/1500	8.8	N	16/0900	31
Maoka	751.6	16/1500	10.3	NE	16/1400	15
Ochiai	754.2	17/1600	9.4	NNE	16/0700	90
Esutoru	755.9	16/1700	7.5	E	17/0600	20
Shikuka	757.9	16/1600	9.3	ESE	17/2200	32
		16/1700				
		16/1800				
Ambetsu	756.5	16/1700	7.1	E	16/2300	8
Toyohara	751.5	16/1300	6.7	NNW	16/1100	33

The Low of 24th-26th: A low of 752 mm originating NE of Harbin on the morning of the 24th first appeared ENE and later advanced NE reaching Alexandrovsk on the morning of the 25th, and was recorded at 750 mm. This low prevailed momentarily in the vicinity of northern Sakhalin, and by the morning of the 26th, 744 mm was observed at sea to the east. Then it moved to the east, and by evening 740 mm was recorded in the central area of the Okhotsk Sea. Taking a NE course it disappeared toward central Kamchatka by the evening of the 27th.

On the evening of the 24th the weather of the island was rather unsettled, but it gradually became worse, and by the next morning it became cloudy and rained in the northern sections of the west coast and at Odomari. On the same day the south wind became stronger and there was rainy weather in various sections. Although it was clear on the morning of the 26th, rain and strong winds predominated along the northern section of the west coast, returning to normal by evening.

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Table 2B

Place	Min	Low	Date/Time	Max Wind	Wind Direction	Date/Time	Precipitation (24th-26th)	Total
Odomari	748.8	mm	25/2400	11.0 m	NNW	26/1300	16 mm	
Honto	749.3		25/2200	7.8	S	24/2000	4	
Maoka	749.3		25/2300	8.7	W	26/1300	11	
Ochiai	748.1		26/0100	11.3	S	24/1700	10	
Esutoru	748.2		25/2400	12.8	NW	26/1600	23	
Shikuka	746.4		26/0100	13.0	S	24/1500	8	
Ambetsu	747.8		26/0300	10.9	SSW	24/1700	26	
			26/0400					

BIOLOGICAL PHENOMENA

Following are notations on when certain animals and insects appeared.

	Date	Place	Compared to last year	Compared to average year
Cicada first heard	2	Ochiai		
	12	Kaimajima		
First salmon caught	10	Koni		
	10	Tonnai		
	14	Motodomari		
	29	Nishinotoro		
Cricket first heard	3	Maoka		
Swallow last seen	20	Kamikiminai		
	28	Konotoro		
Salmon-trout last caught	27	Koni		

Plant seasons.

Plant	Phase	Date	Place	Compared to last year	Compared to average year
Thistle	Budding	5	Noto		
	Full	5	Kamikiminai		
	Bloom	13	Chidori		
		20	Noto		
Lily	Budding	5	Motodomari		
	Full Bloom	10	Motodomari		

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Plant seasons. (Contd)

Plant	Phase	Date	Place	Compared to last year	Compared to average year
Dandelion	Full Bloom	15	Kaimajima		
(EZONYU)*	Full Bloom	15	Kamikiminai		
Cat-bulbed	Full Bloom	10	Noto		
Lily					
Aconite (aconitum japonicum)	Full Bloom	Early Aug-	Kamishikuka		
Rosa Rugosa	Full Bloom	5	Kaimajima		
RUGOSA KAMADO*	Leaves started to turn red	10 20	Osaka Tominichi		
Red- berried Elder	Ripening Begins	10	Odomari	3 days late	4 days early
Fukayama Cherry	Ripening Begins	15	Odomari	Same date	5 days early
Rosa Rugosa	Ripening Begins	22	Odomari	3 days early	8 days early
SANCHIN*	Ripening Begins	28	Odomari	4 days early	4 days early

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Table 3

THUNDERSTORMS

Storms were observed in various places during the month as follows:

Date	Place	Began Time	Ended Time	Direc- tion	Direc- tion of Progress	Intensity	Rain- fall	Notes
6	Esutoru Shikuka	0603 0737	E S	0826 0814	S S	E-S SW-S	Weak Medium	51.4 29.5
	Noto	1000	W	1000	W	W	Weak	... Thunder only with heavy rain
6	Toyo- hara	1407	NW	1407	NW	NW	Medium	69.0 Thunder only with heavy rain
11	Noyoshi Kami- shikuka	1915 2150	N SE	2000 2210	NE SE	N-NE SE	Strong Medium	23.0 --- Heavy rain
20	Shikuka	1333	N	1407	N	N	Weak	--- Thunder only
21	Esutoru Ambetsu	1855 1910	W N	2110 1915	N N	W-N N	Weak Weak	0.0 1.0 Drizzle Thunder and lightning with light rain
	Kami- shikuka	1935	NW	2240	E	NW-E	Strong	... Medium rain
	Kiton	1940	S	2100	N	S-N	Weak	---
	Shikuka	2025	N	2145	E	N-W-S-E	Medium	1.6 Medium rain
	Noto	2110	NW	2200	NW	NW	Weak	5.5
24	Ambetsu	2027	NW	2042	NNW	NW-NNW	Weak	4.1 Thunder only with light rain
25	Moto- domari	1515	SW	1620	SW	SW	Medium	4.3 Medium rain
	Chidori	1610	SW	1930	SE	SW-SE	Strong	37.7 Heavy rain
	Shi- raura	1825	W	2030	W	W	Strong	55.0 Heavy rain
	Noto	1800	W	2130	W	W	Strong	... Heavy rain
	Shikuka	1806	SW	1808	SW	S	Medium	7.5 Medium rain
	Kami- shikuka	1910	N	2010	N	N	Medium	... Medium rain
26	Shikuka	1014	S	1014	S	S	Weak	---

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INSOFT Note 100-1000

Amount of Direct Solar Radiation. An outline of direct solar radiation observations measured by silver-plated measuring devices at Odomari, Esutoru and Shikunka (when the sun was not covered by clouds).

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Table 4. (Contd)

Date	Exact Solar Time in the Area	Amount of Solar Radiation (ergs-m-calories/cm ² -minute)	Route of Passage thru the Atmosphere (See Z)	Visibility		Exact Solar Time in the Area	Amount of Solar Radiation (ergs-m-calories/cm ² -minute)	Route of Passage thru the Atmosphere (See Z)	Visibility		
				Hrs.	Min.				Hrs.	Min.	
4	—	—	—	11	53.7	1.289	1.175	0.72	14	56.7	
9	24.7	1.334	1.429	11	38.7	1.426	1.196	0.79	—	—	
14	48.6	1.402	1.379	0.81	11	51.6	1.443	1.212	0.81	15	14.9
15	34.0	1.319	1.433	0.78	11	40.0	1.339	1.220	0.75	15	0.0
22	46.0	1.393	1.443	0.80	—	—	—	—	—	—	
24	—	—	—	11	57.0	1.462	1.250	0.82	—	—	
28	48.8	1.341	1.484	0.79	11	47.1	1.384	1.289	0.78	15	34.2
31	42.3	1.384	1.524	0.81	11	37.3	1.432	1.309	0.80	15	1.3
Average	No 6	1.362	1.449	0.80	No 7	1.396	1.236	0.78	No 5	1.274	
										1.575	
										0.79	

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Table 4. (Contd)

Date	Average	No 4	No 5	No 6	No 7	No 8	No 9	No 10	No 11	No 12	No 13	No 14	No 15	No 16	No 17	No 18	No 19	No 20	No 21	
Exact Solar Time	0900	1.320	1.60	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
In the Area	0900	1.320	1.60	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
Amount of Solar Radiation	0900	1.245	1.54	0.76	1.64	0.72	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54
(cm ² -calorie/cm ² -minute)	0900	1.245	1.54	0.76	1.64	0.72	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54
Route of Passage	0900	1.245	1.54	0.76	1.64	0.72	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54
Thru the Atmosphere (Sec Z)	0900	1.245	1.54	0.76	1.64	0.72	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54	0.76	1.375	1.54
Exact Solar Time	1200	1.323	1.67	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
In the Area	1200	1.323	1.67	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
Amount of Solar Radiation	1200	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
(cm ² -calorie/cm ² -minute)	1200	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
Route of Passage	1200	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
Thru the Atmosphere (Sec Z)	1200	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
Exact Solar Time	1500	1.323	1.67	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
In the Area	1500	1.323	1.67	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
Amount of Solar Radiation	1500	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
(cm ² -calorie/cm ² -minute)	1500	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
Route of Passage	1500	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
Thru the Atmosphere (Sec Z)	1500	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
Exact Solar Time	1800	1.323	1.67	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
In the Area	1800	1.323	1.67	0.80	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23	0.77	1.371	1.23
Amount of Solar Radiation	1800	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
(cm ² -calorie/cm ² -minute)	1800	1.375	1.64	0.72	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55	0.79	1.338	1.55
Route of Passage	1800	1.375	1.64	0.72	1.55</															

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Table 5.

INSOLATION AT SEA LEVEL

Monthly observations at Odomari made by measuring solar radiations by the ROBIJJI* method giving sea level solar radiations (including air radiation).

August 1939 Insolation at Sea Level (gram-calorie/cm²-minute)

ODOMARI																		
Average	0300	0400	0500	0600	0700	0800	0900	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	
Hourly Value	0.00	0.00	0.03	0.19	0.42	0.61	0.82	0.99	1.07	1.12	1.11	0.91	0.77	0.56	0.28	0.12	0.02	0.00
Solar Radiation at Sea Level	Daily Extremes in Value for 1-minute Duration	Amount	Date	Time	Amount	Date	Time	Minimum	Amount	Date	Time	Minimum	Amount	Date	Time	Maximum	Average	
Daily Reckoning of Solar Radiation at Sea Level	1.92	9	1034		0.77			16	1417			1.58				1.58		
Monthly Totals	Entire Amount	Daily Amounts	Average Maximum	No. of Days	Minimum	Days	Average	Maximum for 1 hour	Extremes	Days	Notes							
	1,6928 (sic)	546	831	13	166	17	75	96	9									

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Table 6.

EARTHQUAKES

There was one tremor observed during the month. It is reported as follows:

August 1939				Earthquake Observations		
Place	Date	Began	Duration	Scale	Type	Note
				Hrs. Min..	I-VI	
Uryu	6	0844	3	I	Rapid	Up-and-down movement centering about Uryu.

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Table 7. WEATHER SUMMARY TABLE August 1939

Place Name	Item Point	Average Pressure (mm)		Temperature (°C)						Wind		Precipitation (mm)	
		Sea Level	Freezing Point	Compared Year	Average High	Average Low	Normal Minimum	Maximum	Date	Low	Date	Average Vapor Ten-	Humidity (%)
				(+) 0.5	21.6	14.5	26.7	31	31	9.9	15	13.2	88
Odomari	757.6	754.1	17.7	(+) 0.5	21.6	14.5	26.7	31	9.9	15	13.2	88	
Honto	757.4	756.8	18.8	(+) 0.4	22.0	15.6	27.8	31	10.4	14	13.6	84	
Maoaka	757.5	754.8	18.3	(+) 0.4	21.8	15.0	27.6	31	10.7	15	13.6	86	
Ochiai	757.7	753.9	17.7	(+) 0.6	23.3	13.3	30.4	31	4.8	15	12.9	85	
Esutoru	757.1	753.2	17.7	...	20.5	14.9	25.1	25	1.8	14	12.7	84	
Sniikuka	757.3	756.4	16.3	(+) 0.4	20.2	12.5	27.5	27	7.7	14	12.2	89	
Ambetsu	756.7	749.1	17.2	(+) 1.8	21.8	13.5	29.2	31	9.4	14	12.0	82	

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Table 7. (Contd)

Place Name	$\geq 0.1\text{mm}$	Year	Item	Precipi-	Compared to Average	Snow	Elec-	trical	Storms	Daily Weather				Temperature	
										Mist	Fire	Cloudy	No.	Storm	Frost
Odomari	13	(+)	1	—	—	—	—	—	—	14	4	16	4	7	—
Honto	11	(-)	3	—	—	—	—	—	—	2	3	13	3	—	—
Maoka	15	(+)	1	—	—	—	—	—	—	4	2	16	3	2	—
Ochiai	15	(+)	1	—	—	—	—	—	—	10	2	12	4	3	—
Isotoru	19	(+)	1	—	—	—	—	—	—	6	3	17	4	3	—
Shikuka	16	(+)	1	—	—	—	—	—	—	4	2	14	5	7	—
Ambetsu	20	(+)	5	—	—	—	—	—	—	1	8	3	20	6	5

Place Name	Low	Average	High	Earthquake Occurrences			
				Tremors	No.	Precursors	Tremors
Odomari	$\geq 25^{\circ}$	$\geq 25^{\circ}$	$\geq 25^{\circ}$	—	3	—	—
Honto	—	—	—	—	3	—	—
Maoka	—	—	—	—	3	—	—
Ochiai	—	—	—	—	13	—	—
Isotoru	—	—	—	—	1	—	—
Shikuka	—	—	—	—	3	—	—
Ambetsu	—	—	—	—	5	—	—

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Table 8. WEATHER TABLES [Odomari] August 1939

Item	Avg Atmos- pheric Pres- sure at Sea	Temperature (°C)	Avg Aver- age	Avg Maxi- mum	Avg Min- imum	Humid- ity (%)	Vapor Ten- sion	Avg Max- imum	Wind Di- rection
Date	Level (mm) 700+								
1	54.9	14.2	17.4	12.1	89	10.6	5.5	8.4	NE
2	57.3	14.7	18.7	11.5	91	11.3	2.2	4.2	SW,SSW
3	58.5	17.7	24.8	13.1	88	13.1	1.4	4.9	ENE
4	57.9	18.5	22.8	14.8	91	14.3	1.7	3.3	SSE,S
5	56.6	22.0	25.6	18.1	87	17.0	4.0	6.9	SSW
6	55.4	20.7	26.5	16.3	90	16.4	2.9	6.7	NNE
7	55.2	14.5	16.8	13.6	91	11.2	9.0	12.0	NNE
8	58.3	15.2	18.4	12.7	88	11.2	2.8	4.7	SW
9	64.8	16.0	18.9	12.5	88	11.9	1.8	4.7	SW
10	59.7	16.4	19.2	12.1	94	13.1	5.1	10.4	SSW
Average	57.4	17.0	20.9	13.7	90	13.0	3.6		
Normal Yr	57.0	17.4	21.2	14.0	88	13.2	3.3		
11	50.2	19.1	23.3	17.4	86	14.1	6.6	10.2	SSW
12	53.6	18.9	24.8	14.5	77	12.3	3.0	5.2	SW
13	59.6	16.1	19.9	10.7	73	9.9	4.0	8.0	WSW
14	60.6	15.8	20.1	11.3	75	9.9	2.4	4.7	SSW
15	59.8	14.7	20.4	9.9	81	10.0	5.7	11.7	NE
16	53.1	14.9	16.9	12.6	93	11.7	12.4	17.8	NE
17	54.1	16.7	19.0	15.1	96	13.5	8.0	12.3	ESE
18	58.8	16.6	18.0	15.3	98	13.7	5.8	7.7	S
19	61.3	17.6	21.7	15.7	95	14.2	2.9	4.1	S
20	59.3	19.3	22.4	16.5	92	15.2	2.4	7.3	SSW
Average	57.0	17.0	20.7	13.9	86	12.4	5.3		
Normal Yr	57.4	17.4	21.2	13.8	88	13.1	3.6		
21	55.8	20.0	23.3	18.4	90	15.5	4.3	8.2	WSW
22	56.6	20.2	24.1	17.1	83	14.4	2.6	5.8	ENE
23	58.2	14.7	21.3	15.1	96	14.1	2.1	3.9	E
24	57.8	18.4	22.1	15.5	93	14.5	3.6	7.9	SSW
25	52.3	20.2	23.5	18.7	93	16.3	5.8	8.8	SSW
26	53.5	18.4	20.4	17.1	70	10.9	6.8	11.0	WNW
27	60.2	18.2	22.2	13.9	76	11.9	3.4	6.7	W
28	61.6	17.4	22.4	12.6	89	13.1	2.3	3.9	SSW
29	60.4	18.7	24.0	13.4	88	13.8	2.0	3.4	SW,SSW
30	56.9	19.6	22.5	17.7	93	15.8	3.5	8.4	SW
31	60.0	20.0	26.7	15.3	82	14.1	2.2	3.7	W
Average	57.6	19.0	22.0	15.9	87	14.0	3.5		
Normal Yr	58.7	16.9	20.6	13.3	88	12.6	3.6		
Avg for Mo	57.5	17.7	21.6	14.5	88	13.2	4.1	17.8	NE
Normal Yr	57.7	17.2	21.0	13.7	88	13.0	3.5	20.1	NE

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Table 8. (Contd)

Avg Sky Cover (0-10)	Hours of Sun- shine	Pre- cipi- tation (mm)	Evapo- ration (from a box) (mm)	Avg Snow- fall (cm)	Average Ground Level Temperature (°C)	Mini- mum Ground Level (1000 hrs)	Sea Water Temper- ature (°C)	Re- marks
Jordan Method								
8.6	0.5	1.4	1.5	--	16.6	10.5	14.7	III
10.0	7.6	--	3.9	--	20.2	10.0	17.1	II-III
6.2	9.4	--	4.6	--	22.9	13.2	18.8	II-III
9.2	2.4	--	4.3	--	24.0	12.3	20.2	III
5.8	11.4	--	4.9	--	26.2	17.0	20.4	III
10.0	1.4	19.3 (0.9)	1.8	--	22.4	16.0	20.3	III
10.0	--	35.3	1.8	--	17.1	12.6	16.2	IV
9.6	4.4	--	2.9	--	19.4	12.4	16.2	II
5.8	8.8	0.0	3.6	--	22.0	11.9	17.5	III
9.4	3.0	0.1 (1.8)	--	18.8	8.6	17.5	II-III	IV
8.5	48.8	56.1	3.0	--	21.0	12.5	17.9	
7.2	56.8	23.3	3.2	--	19.2	....	....
9.6	3.9	0.0	4.3	--	22.4	15.3	18.2	III
5.6	10.4	0.0	6.1	--	25.2	12.4	20.4	III
0.8	13.2	0.0	5.5	--	22.1	8.6	17.1	II
1.8	13.1	--	5.0	--	22.0	8.9	18.6	II
7.0	10.9	--	3.9	--	21.2	7.3	18.0	III
10.0	--	1.5 (0.7)	--	--	17.5	12.0	14.9	III
10.0	--	17.8 (0.5)	--	--	17.2	14.7	13.2	III
10.0	--	15.0 (1.9)	--	--	18.2	15.3	16.2	III
7.6	0.6	4.6 (2.2)	--	--	19.6	15.4	16.2	III
7.6	9.5	0.1 (3.7)	--	--	23.0	15.5	18.8	III
7.0	61.6	39.0	3.4	--	20.8	12.5	17.2	
7.2	55.0	34.1	3.0	--	18.9	....	....
5.2	7.8	0.3	4.4	--	21.7	17.2	19.9	III
5.4	7.2	--	3.7	--	23.8	14.8	19.5	II
10.0	3.7	--	(2.3)	--	22.0	12.6	18.2	III
8.2	6.8	0.1	(2.4)	--	24.9	16.0	20.0	III
8.8	5.0	15.8	(4.7)	--	22.0	17.4	19.2	III
0.8	12.4	0.0	5.5	--	20.1	12.5	18.5	III
9.4	6.9	--	4.0	--	21.5	10.1	17.6	II
0.2	12.7	--	4.6	--	22.2	9.3	19.5	III
4.6	11.2	0.0	4.2	--	25.1	10.9	19.8	III
10.0	0.6	0.0 (1.2)	--	--	20.3	17.0	19.8	III
6.0	8.8	0.9	3.8	--	22.4	12.3	19.7	II
6.2	75.5	17.1	3.7	--	22.4	13.6	18.3	
7.0	56.5	35.4	2.8	--	19.6	
Ttl	193.3							
7.2	4.4	Ttl 112.2	3.4	--	21.4	12.9	18.1	
Ttl	173.3							
7.1	4.0	Ttl 92.7	3.1	--	20.3	11.8	

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Table 9. WEATHER TABLES Honto August 1939

Item	Avg Atmos- pheric Pressure, at Sea- Level	Temperature (°C) Aver- age High Level (mm) 700+	Wind					
			Avg Max- imum Humid- ity (%)	Avg Min- imum Humid- ity (%)	Avg Ten- sion (mm)	Avg Velo- city (over- all avg) m/sec	Max- imum Velocity (mm) m/sec	Di- rection
1	54.7	15.2	17.8	14.3	87	11.1	3.1	5.4 N
2	57.0	16.6	19.7	14.2	87	12.2	0.9	2.1 N
3	58.3	17.9	22.1	14.5	89	13.5	1.2	3.1 NW
4	57.3	21.5	24.9	16.6	95	16.1	1.9	4.4 SSW
5	56.2	24.3	26.8	22.1	81	18.3	4.1	6.0 SSW
6	54.7	23.2	27.8	19.8	87	18.2	1.6	4.9 E
7	54.4	18.8	21.7	16.3	84	13.5	3.0	6.9 E
8	60.9	16.5	18.9	13.4	83	11.5	1.7	4.2 NNW
9	64.7	16.9	20.8	13.2	85	12.1	1.2	3.1 ENE
10	58.9	19.2	23.0	11.4	77	12.9	6.0	9.8 SSW
Average	57.7	19.0	22.4	15.6	84	13.9	2.5	
Normal Yr	56.1	18.7	22.0	15.2	84	13.5	3.4	
11	50.3	20.7	23.2	18.9	83	14.9	5.6	9.5 SSW
12	54.0	17.8	21.3	14.6	75	11.4	3.6	8.0 N
13	60.3	16.3	19.2	12.7	79	10.8	2.8	5.4 N
14	60.5	15.5	19.7	10.4	81	10.6	2.5	3.9 ENE
15	59.4	15.3	19.7	10.6	83	10.7	1.9	4.3 ENE
16	52.9	16.7	19.4	12.2	78	11.1	4.1	8.8 N
17	53.1	18.5	20.5	17.3	86	13.7	2.7	5.0 E
18	58.5	17.6	19.1	15.8	94	14.0	2.4	3.7 S
19	60.9	19.2	21.7	17.7	89	14.7	2.4	3.4 SSW
20	59.4	19.8	22.5	17.7	89	15.3	2.2	4.3 SSW
Average	56.9	17.8	20.6	14.8	84	12.7	3.0	
Normal Yr	57.1	18.8	22.2	15.2	83	13.5	3.7	
21	55.8	21.9	24.7	19.5	77	15.1	4.7	6.9 SSW
22	56.5	19.3	21.4	17.8	87	14.5	1.9	4.3 NNW
23	58.2	18.0	21.0	16.8	94	14.4	0.3	2.8 E
24	57.1	20.4	24.9	16.7	84	15.0	3.5	7.8 S
25	51.8	22.0	23.7	20.1	86	16.9	5.5	7.3 SSW
26	54.4	17.6	20.7	14.5	77	11.4	3.5	5.8 WSW
27	61.0	16.7	21.8	10.8	79	10.8	2.6	4.6 E
28	61.7	18.5	22.3	14.9	83	13.2	2.6	4.4 E
29	59.6	20.5	26.5	14.9	75	13.6	3.4	5.3 ENE
30	57.0	20.3	22.5	17.7	91	16.2	3.6	8.5 S
31	60.5	18.8	22.5	15.2	85	13.7	1.6	4.0 ENE
Average	57.6	19.5	23.0	16.3	83	14.0	3.0	
Normal Yr	58.3	17.8	21.3	14.1	82	12.5	3.6	
Avg for Mo	57.4	18.8	22.0	15.6	84	13.6	2.8	Max 9.8 SSW
Normal Yr	57.2	18.4	21.8	14.8	83	13.1	3.6	Max 16.9 S, SW

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Table 9. (Contd.)

Avg Sky Cover (0-10)	Hours of Sun- shine	Pre- cipi- tation (mm)	Evapo- ration (from a box) (mm)	Avg Level Temperature (°C)	Min- imum Ground Temper- ature (°C)	Sea Level Ground Temper- ature (°C)	Re- marks
Jordan Method				Average Water Temperature (°C)			
9.8	1.5	0.9	(2.0)	--	16.9	12.2	15.5
6.6	8.2	---	4.5	--	21.4	12.0	12.9
5.0	8.2	---	4.5	--	21.6	12.5	15.5
6.0	6.5	---	4.9	--	22.6	13.9	15.5
5.8	9.3	---	6.9	--	26.0	19.2	16.7
9.0	2.4	21.2	(4.3)	--	23.7	19.0	17.1
10.0	1.7	35.5	3.7	--	20.4	15.1	16.7
3.8	10.9	---	(5.1)	--	21.8	11.4	17.0
3.6	9.5	0.1	5.8	--	23.0	11.5	17.2
9.6	5.7	---	3.7	--	20.0	9.1	18.0
6.9	63.7	57.7	4.5	--	21.7	13.6	16.2
7.6	52.3	36.7	3.8	--	21.5	....	....
6.2	6.6	---	5.9	--	23.3	16.7	16.6
2.6	11.6	0.0	6.7	--	22.4	12.6	18.0
2.4	12.6	---	5.7	--	22.9	10.6	17.6
0.0	12.9	---	5.6	--	22.3	8.2	14.0
5.0	12.6	---	5.0	--	20.1	9.0	8.0
8.6	1.8	0.0	(3.0)	--	18.1	9.9	12.5
9.8	0.3	5.1	(0.5)	--	18.8	14.2	11.0
10.0	---	21.8	(1.7)	--	17.6	15.3	11.0
7.4	2.6	4.5	3.5	--	19.8	15.0	13.1
9.2	3.3	0.0	4.0	--	20.8	16.3	14.8
6.1	64.2	31.4	6.2	--	20.6	12.8	13.7
7.3	53.1	41.4	3.6	--	20.9	....	....
5.4	8.8	---	(5.6)	--	22.7	18.0	14.6
7.6	2.4	1.1	3.5	--	21.2	14.9	14.5
8.6	2.3	0.3	(2.3)	--	20.2	14.2	14.5
9.4	3.1	0.0	4.7	--	23.1	15.5	14.8
9.6	---	4.1	(2.8)	--	20.9	17.9	17.0
0.0	12.1	---	5.0	--	20.1	10.8	17.0
8.2	7.8	---	5.4	--	20.8	8.4	17.1
1.2	11.9	---	6.2	--	21.7	12.0	18.0
3.8	11.0	0.0	(5.0)	--	23.6	13.0	18.5
9.8	---	7.5	(0.7)	--	20.0	15.8	18.5
5.2	8.1	---	4.7	--	21.6	12.3	18.3
6.3	67.4	13.0	4.2	--	21.4	13.9	16.6
7.1	57.6	35.3	3.8	--	20.8
Ttl	195.2	Ttl					
6.4 %	45	102.1	4.3	--	21.3	13.4	15.5
Ttl	165.4	Ttl					
7.3 %	38	113.4	3.7	--	20.6	13.0

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Table 10. WEATHER TABLES Macka August 1939

Item	Avg Atmos- pheric Pressure at Sea Level	Temperature (°C)				Avg Humid- ity (%)	Avg Vapor Ten- sion (mm)	Wind Max- imum velo- city (m/sec)	Wind Dir- ection all avg m/sec
		Aver- age High Low	Max- imum imum	Min- imum imum	Wind City				
Date	(mm) 700+								
1	55.1	15.4	17.4	13.5	84	11.0	2.2	4.4	NNE
2	57.0	16.5	20.0	13.1	90	12.6	2.0	4.3	SW
3	58.6	17.6	20.5	14.5	92	13.7	1.4	2.4	SW
4	57.3	20.8	25.0	15.0	88	16.1	2.5	4.5	SW
5	56.1	23.6	26.1	21.5	87	18.9	4.3	7.8	S
6	55.2	22.2	27.6	19.8	93	18.5	2.0	4.4	ESE
7	55.1	16.8	20.6	15.0	84	11.9	3.5	8.1	ESE
8	60.9	15.9	18.5	12.2	85	11.4	2.0	3.5	N
9	64.7	15.9	19.5	12.5	90	12.1	1.9	4.2	ESE
10	58.6	18.9	23.0	12.8	84	13.7	5.9	10.6	SSW
Average	57.8	18.4	21.8	85.0	88	14.0	2.8		
Normal Yr	56.6	18.3	21.9	14.8	85	13.5	3.4		
11	49.9	20.1	22.5	17.4	86	14.9	6.9	8.8	SSW,S
12	54.3	17.0	21.3	13.7	80	11.5	3.9	7.3	N
13	60.4	15.7	19.6	11.1	83	10.9	2.5	7.4	E
14	60.6	15.6	19.8	10.9	82	10.8	2.5	4.8	SE
15	59.5	15.9	22.5	10.7	72	9.4	2.8	4.7	SE
16	54.1	16.1	19.2	13.2	78	10.6	5.0	10.3	NE
17	53.9	18.9	21.0	16.4	83	13.4	3.6	5.5	E
18	58.4	17.1	18.5	15.3	96	13.7	3.6	6.0	SSW
19	60.7	19.0	21.5	17.2	92	15.0	3.5	5.2	SSW
20	59.5	19.2	22.5	16.9	94	15.5	2.8	4.3	SSW
Average	57.1	17.5	20.8	14.3	84	12.6	3.7		
Normal Yr	57.1	18.1	21.9	14.4	84	13.1	3.6		
21	55.5	21.7	24.5	18.8	79	15.0	5.7	8.7	SSW
22	56.7	18.4	21.4	16.5	90	14.0	1.8	4.1	S
23	58.0	18.3	21.5	16.9	92	14.4	1.2	3.0	W
24	57.2	20.0	24.0	15.4	88	15.2	3.7	6.8	S
25	51.7	21.0	23.7	18.9	93	17.0	5.3	7.5	SSW
26	54.0	16.9	19.7	13.2	84	11.9	4.8	8.7	W
27	61.0	17.5	22.0	12.5	77	11.3	3.0	6.8	WSW
28	62.1	17.7	22.2	13.1	85	12.7	3.3	5.1	SE
29	59.7	20.2	24.8	14.3	78	13.9	3.3	5.1	SW
30	56.9	19.6	23.0	17.7	94	16.0	4.3	9.2	SSW
31	60.7	18.7	23.1	14.2	85	13.6	2.6	5.2	S
Average	57.6	19.1	22.7	15.6	86	14.1	3.5		
Normal Yr	58.5	17.5	21.2	13.9	82	12.4	3.8		
Avg for Mo	57.5	18.3	21.8	15.0	86	13.6	3.3	10.6	SSW
Normal Yr	57.5	17.9	21.7	14.3	84	13.0	3.6	19.3	ESE

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Table 10.

Avg Cover (0-10)	Hours of Sun- shine	Pre- cipi- tation (mm)	Evapo- ration (from a box) (mm)	Avg Snow- fall (cm)	Average Ground Level (mm)	Min- imum Temper- ature (°C)	Sea Level (Coastal) Temper- ature (°C)	Water Level (1000 hrs) Temper- ature (°C)	Re- marks
10.0	2.5	9.4	(1.1)	--	16.2	12.3	11.0	11.0	2
7.4	10.0	--	3.9	--	21.1	11.1	9.0	2	2
8.4	6.7	--	2.8	--	20.3	13.4	10.6	2	2
9.0	8.8	--	4.6	--	24.5	12.8	12.5	2	2
7.2	10.1	--	4.3	--	25.6	18.6	16.8	2	2
10.0	4.0	32.8	(1.0)	--	25.3	13.2	19.5	2	2
9.4	1.3	13.1	3.4	--	18.8	14.7	16.5	2	2
3.6	13.4	--	3.8	--	20.7	9.8	17.0	2	2
5.2	12.0	--	3.6	--	21.8	10.8	16.2	2	2
10.0	5.8	0.0	(1.9)	--	19.2	11.2	15.2	2	2
8.0	74.3	55.3	3.0	--	21.3	12.8	14.4		
7.3	54.1	29.3	3.5	--	20.6	....	....
7.2	7.4	4.9	3.0	--	22.4	16.8	16.0	2	2
4.4	7.9	--	4.0	--	18.4	11.2	18.4	2	2
1.0	13.1	--	3.8	--	20.9	8.4	19.5	2	2
0.2	13.3	--	3.8	--	20.9	9.0	19.4	2	2
5.2	12.4	--	4.7	--	18.2	9.5	18.8	2	2
8.0	2.6	0.0	(3.2)	--	16.4	10.2	15.4	2	2
9.6	1.6	1.0	(1.4)	--	19.5	13.6	16.5	2	2
10.0	—	9.3	(0.7)	--	17.4	14.8	17.8	2	2
9.2	2.2	4.6	(2.4)	--	21.3	15.1	11.5	2	2
10.0	1.3	0.3	(3.3)	--	21.1	15.9	12.9	2	2
6.5	61.6	0.1	3.0	--	19.7	12.5	16.6		
6.8	57.4	37.1	3.6	--	20.2	....	....
8.2	8.8	0.1	(6.9)	--	22.1	17.9	14.6	2	2
7.0	7.4	1.9	1.5	--	23.0	11.9	16.0	2	2
9.4	4.0	0.1	(2.3)	--	22.0	12.4	16.5	2	2
8.4	8.3	--	(3.5)	--	22.4	16.0	17.0	2	2
10.0	—	10.4	(2.4)	--	20.6	15.7	17.9	2	2
2.2	12.0	0.1	4.0	--	19.7	9.9	18.0	2	2
7.4	7.8	--	4.5	--	19.3	9.0	18.3	2	2
3.2	11.8	--	3.8	--	19.9	10.6	18.9	2	2
6.6	8.8	0.1	(3.8)	--	22.5	10.8	18.6	2	2
10.0	—	17.1	(1.5)	--	20.0	16.3	19.5	2	2
7.4	8.9	--	3.2	--	21.1	10.5	19.6	2	2
7.3	77.8	29.8	3.4	--	21.1	12.8	17.7		
7.0	59.7	32.3	3.3	--	19.0		
Ttl	213.7	Ttl							
7.3 %	49	105.2	3.2	--	20.7	12.7	16.3		
Ttl	172.1	Ttl							
7.0 %	39	98.8	3.5	--	19.9	11.9		

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Table 11. WEATHER TABLES [Ochiai] August 1939

Item	Avg Atmos- pheric Pressure at Sea Level	Temperature (°C)			Avg Humid- ity (%)	Avg Vapor Tens- sion (mm)	Avg Wind velo- city (mm over- all avg) m/sec	Max- imum Wind velo- city m/sec	Dir- ection
		Aver- age High 700+	Max- imum Low	Min- imum					
1	57.0	12.4	13.2	11.6	99	10.5	4.3	7.3	NNE
2	57.0	17.4	25.9	11.7	85	12.5	2.7	6.9	S
3	58.9	17.4	23.3	13.5	86	12.7	2.3	4.0	S
4	57.1	21.2	29.4	13.7	86	16.0	5.1	8.4	S
5	55.6	23.8	30.4	18.6	84	18.1	6.2	8.6	S
6	56.3	18.2	26.3	14.1	95	15.0	2.1	4.6	N
7	57.6	13.1	14.4	12.4	97	10.8	3.8	5.2	NNE
8	61.3	14.5	19.5	11.2	88	10.8	1.8	3.3	NNE
9	64.9	16.1	22.0	10.3	85	11.4	1.5	3.8	NNE
10	58.2	17.4	20.3	11.8	86	12.8	7.6	12.4	S
Average	58.4	17.2	22.5	12.9	89	13.1	3.7		
Normal Yr	56.6	17.8	22.9	13.2	85	12.9	3.0		
11	48.9	22.6	26.7	18.5	70	14.1	7.0	10.1	SW
12	53.6	16.8	22.1	11.2	74	10.4	2.8	6.7	N
13	59.7	17.0	24.3	10.2	71	9.8	1.7	5.8	W
14	61.0	14.6	20.7	8.7	77	9.4	1.5	3.6	NE
15	61.1	11.8	16.7	4.8	86	8.9	2.1	4.4	NE
16	56.6	12.9	14.1	11.6	98	10.8	5.7	9.4	NNE
17	55.7	16.0	18.2	13.5	95	13.0	3.0	7.3	E
18	58.4	16.6	20.6	14.0	96	13.5	2.3	5.8	S
19	60.5	18.8	22.6	16.7	93	15.0	5.1	6.8	S
20	59.1	19.6	23.7	16.3	87	14.7	3.6	5.4	W
Average	57.5	16.7	21.0	12.6	85	12.0	3.5		
Normal Yr	57.2	17.2	22.3	12.5	85	12.4	3.0		
21	55.1	22.0	30.2	17.8	79	15.1	5.6	9.0	SSW
22	56.8	18.8	24.3	16.0	85	13.6	2.3	4.3	SSW
23	58.0	19.4	25.9	15.2	88	14.5	1.9	3.5	SSE
24	56.9	19.4	25.1	14.4	89	14.7	5.7	11.3	S
25	51.4	21.0	26.1	18.7	92	17.0	6.5	8.8	S
26	52.6	17.3	21.1	11.9	75	10.8	4.8	9.2	W
27	60.6	17.4	24.7	11.1	72	10.6	3.0	5.1	WSW
28	61.9	17.4	27.7	9.8	78	10.8	1.8	3.8	S
29	59.7	19.4	27.8	10.4	82	13.3	4.1	7.3	S
30	56.4	20.3	27.0	17.5	91	16.1	4.7	8.8	S
31	60.4	19.4	27.2	14.2	82	13.5	1.9	4.5	SW
Average	57.3	19.3	26.1	14.3	83	13.6	3.8		
Normal Yr	58.6	16.4	21.5	11.7	84	11.5	3.0		
Avg for Mo	57.7	17.7	23.3	13.3	85	12.9	3.7	12.4	S
Normal Yr	57.5	17.1	22.3	12.5	85	12.3	3.0	17.5	SSW

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Table 11. (Contd)

Avg Cover (0-10)	Hours of Sun- shine	Pre- cipi- tation (mm)	Evapo- ration (from a box) (mm)	Avg Snow- fall (cm)	Average Ground Level (Coastal) (mm)	Min- imum Temper- ature (°C)	Sea Water Level (1000 hrs)	Re- marks
Jordan Method								
10.0	—	41.8	(1.6)	—	14.2	11.1	—	—
6.6	11.0	1.2	5.5	—	20.5	11.2	—	—
7.8	9.0	—	3.1	—	19.0	11.1	—	—
3.6	12.6	—	5.8	—	24.6	11.1	—	—
5.2	12.0	—	4.3	—	25.2	16.6	—	—
9.2	1.4	42.9	(1.3)	—	19.1	13.3	—	—
10.0	—	28.9	(1.3)	—	15.0	11.8	—	—
7.2	4.4	1.9	3.6	—	18.3	7.4	—	—
4.2	10.4	—	4.6	—	21.0	7.0	—	—
6.8	4.8	0.0	(3.3)	—	17.9	8.1	—	—
7.1	65.4	116.7	3.4	—	19.5	10.9	—	—
7.3	57.5	30.7	3.9	—	20.6	—	—	—
6.0	9.4	0.2	5.3	—	22.8	13.8	—	—
5.0	8.1	—	4.6	—	17.3	7.0	—	—
4.0	13.1	—	5.2	—	19.6	6.0	—	—
0.6	12.4	0.0	5.3	—	18.8	5.1	—	—
8.6	6.3	—	(2.5)	—	15.6	1.6	—	—
10.0	—	19.9	(1.6)	—	13.9	11.1	—	—
10.0	0.5	9.9	(0.4)	—	16.1	12.6	—	—
10.0	—	8.7	(1.3)	—	17.6	13.6	—	—
9.0	2.8	1.6	(2.4)	—	19.9	14.6	—	—
9.2	2.6	—	(1.8)	—	19.5	14.1	—	—
7.2	55.1	90.3	3.0	—	18.1	10.0	—	—
7.0	55.2	36.3	3.5	—	19.6	—	—	—
6.4	5.8	0.4	3.5	—	22.2	15.6	—	—
5.2	7.5	—	3.7	—	21.2	12.6	—	—
6.2	7.1	—	3.7	—	21.8	11.1	—	—
3.6	11.1	—	(4.0)	—	22.5	15.1	—	—
10.0	1.2	9.1	(3.6)	—	21.6	15.9	—	—
4.4	12.7	0.5	4.0	—	18.2	8.6	—	—
9.0	9.6	—	4.1	—	18.8	6.7	—	—
0.2	12.7	—	4.8	—	18.6	5.6	—	—
4.8	10.1	0.1	(4.3)	—	20.7	7.8	—	—
10.0	1.7	0.5	(2.2)	—	21.4	16.1	—	—
7.4	8.1	0.0	4.1	—	21.0	11.6	—	—
6.1	87.5	10.6	3.8	—	20.7	11.5	—	—
7.1	57.8	40.1	3.2	—	18.3	—	—	—
Ttl	208.0	Ttl						
6.8 %	47	217.6	3.4	—	19.5	10.8	—	—
Ttl	170.5	Ttl						
7.1 %	39	107.1	3.5	—	19.4	—	—	—

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Table 12. WEATHER TABLES Esutoru August 1939

Item	Avg Atmos- pheric Pressure at Sea Level	Temperature ($^{\circ}$ C) Aver- age High Low	Avg Max- imum imum	Avg Min- imum imum	Avg Humid- ity (%)	Vapor Ten- sion (mm)	Avg Wind Maxi- mum m/sec	Wind Dir- ection Veloc- ity m/sec
Date	(mm) 700+					all avg (mm)	avg m/sec	
1	56.7	17.3	20.0	14.3	81	11.9	1.3	2.5 SSW
2	56.4	17.3	19.0	15.2	88	12.9	3.7	7.5 SSW
3	58.4	17.6	20.2	15.7	84	12.5	1.6	3.0 WNW
4	56.1	20.1	22.5	16.7	83	14.6	4.0	7.9 S
5	54.7	21.3	23.6	19.6	85	15.8	5.0	8.8 S
6	55.7	19.2	21.3	17.1	97	16.0	1.8	4.3 SE, ESE
7	57.2	16.3	18.7	14.6	93	12.9	2.4	5.8 NNE
8	61.1	15.7	17.6	13.6	89	11.7	1.8	3.3 NW
9	64.4	16.4	19.6	12.5	89	12.2	2.6	4.4 SE
10	55.5	18.1	21.6	14.3	79	12.8	7.2	13.2 SSW
Average	57.6	17.9	20.4	15.4	86	13.3	3.1	
11	46.9	19.7	22.6	17.0	81	13.8	6.1	8.8 SSW
12	54.2	14.0	17.6	11.8	86	10.2	7.0	16.2 N
13	59.7	15.3	18.6	12.0	82	10.6	2.5	5.7 NNW
14	60.7	15.7	19.4	10.8	79	10.5	2.3	5.0 ESE
15	60.4	17.5	20.6	14.0	77	11.5	2.1	5.0 ESE
16	57.9	19.4	25.1	14.0	69	11.4	3.1	7.0 ENE
17	57.7	18.9	22.1	14.8	73	11.7	4.0	7.5 E
18	58.0	16.9	18.3	15.4	93	13.3	1.6	3.3 ESE
19	60.0	17.0	18.6	15.5	96	13.8	1.5	5.2 S
20	58.4	17.3	19.4	15.4	96	14.0	2.3	7.6 ESE
Average	57.4	17.2	20.2	14.1	83	12.1	3.3	
21	53.8	19.6	23.9	17.4	91	15.5	4.5	9.3 ESE
22	57.1	17.2	20.6	14.5	79	11.5	3.2	7.0 N
23	57.9	17.3	20.9	13.9	72	10.5	3.1	4.8 SSW
24	55.6	18.0	21.9	12.8	81	12.6	4.8	9.6 S
25	50.6	18.9	21.2	15.9	93	15.2	4.0	7.8 SSW
26	51.4	15.9	16.6	13.2	82	11.1	8.0	13.2 NW
27	59.5	17.1	20.0	15.4	70	10.2	6.0	8.8 WNW
28	61.3	17.4	20.1	14.9	83	12.5	4.4	7.4 SW
29	58.7	20.1	22.9	15.4	79	13.8	5.3	7.9 SSW
30	55.0	19.1	21.2	17.5	91	14.9	5.2	9.8 SW
31	60.2	18.1	20.6	15.2	85	13.0	2.8	4.9 N
Average	56.4	18.1	20.9	15.1	82	12.8	4.7	
Avg for Mo	57.1	17.7	20.5	14.9	84	12.7	3.7	16.2 Max N.

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Table 12. (Contd)

Avg Sky Cover (0-10)	Hours of Sun- shine	Pre- cipi- tation (mm)	Evapo- ration from a box (mm)	Avg Snow Level (cm)	Average Ground Level (Coastal) Temperature (°C)	Min- imum Temper- (°C)	Sea Water Level (1000 hrs) Temper- ature (°C)	Re- marks
8.2	0.9	0.6	(1.3)	--	17.3	12.8	17.8	◎
9.6	1.4	0.5	(2.0)	--	19.7	11.7	16.8	◎
8.8	6.5	0.1	3.6	--	20.9	13.6	17.6	◎
2.8	9.7	--	5.3	--	23.3	14.0	18.5	◎
7.6	7.7	0.1	(3.6)	--	22.0	18.2	18.9	◎
10.0	--	45.4	(0.9)	--	19.2	17.4	18.5	△○□
10.0	--	6.0	(1.2)	--	17.8	13.0	17.3	◎
7.0	5.9	0.2	3.2	--	19.5	12.2	18.0	◎
5.2	12.4	--	4.4	--	18.9	9.6	18.8	▲
10.0	0.9	1.3	(2.8)	--	16.4	11.8	17.7	△○□
7.9	45.2	54.2	2.8	--	19.5	13.4	18.0	••••
8.0	8.5	2.1	(4.3)	--	21.3	14.4	18.2	◎
9.2	8.2	2.8	(3.5)	--	14.9	11.8	14.5	○△
6.2	7.6	0.0	3.1	--	17.0	9.3	17.3	△
0.0	13.5	--	3.6	--	18.0	7.8	17.7	▲
2.0	13.2	--	4.6	--	18.9	8.3	15.8	△○□
8.2	5.9	1.6	(4.2)	--	17.4	9.8	15.5	◎
9.2	4.2	0.1	(2.4)	--	17.9	11.2	9.7	◎
10.0	--	8.9	(0.9)	--	17.7	14.9	9.8	△○
10.0	--	9.0	(1.1)	--	19.3	15.2	13.6	△○
8.8	2.9	0.4	(1.9)	--	19.9	14.7	13.6	△○
7.2	63.8	24.9	3.0	--	18.2	11.7	14.6	••••
9.4	4.4	0.7	(2.9)	--	20.3	15.5	15.7	△○
2.0	13.3	--	4.8	--	19.0	11.4	17.5	▲
4.2	8.4	--	3.5	--	18.1	9.6	16.5	○△○□
6.2	8.2	0.0	(2.5)	--	19.1	9.4	16.6	△○□
10.0	1.6	21.9	(2.4)	--	19.4	15.4	17.5	△○
6.0	3.6	0.9	(3.7)	--	16.9	13.6	17.2	△○□
7.6	10.8	--	4.4	--	17.8	12.5	17.5	○
1.4	12.5	--	4.2	--	18.4	12.0	17.7	△○□
8.4	7.2	--	(4.0)	--	20.9	13.4	18.4	◎
10.0	2.6	5.8	2.4	--	19.9	15.5	18.5	△○□
1.4	12.9	--	2.8	--	19.0	12.0	18.8	○△○
6.1	85.4	29.3	3.4	--	19.0	12.8	17.4	••••
Ttl	194.3	Ttl						
7.0	% 44	108.4	3.1	--	18.9	12.6	16.7	

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Table 13. WEATHER TABLES [Shikuka] August 1939

Item	Avg Atmos- pheric Pressure at Sea Level	Temperature (°C)	Avg Aver- age High	Avg Max- imum	Avg Min- imum	Avg Humid- ity (%)	Vapor Ten-	Avg Wind Maxi- mum rec-	Wind Di- rection city
Date	(mm) 700+						(mm)	(over- all avg) m/sec	
1	57.5	15.6	19.0	12.4	92	12.2	2.2	4.7	NNE
2	56.1	15.4	17.0	13.8	92	11.9	4.8	9.3	SSW
3	58.5	15.7	19.0	10.8	86	11.6	5.3	9.2	SSW
4	56.1	16.9	20.0	13.0	89	12.8	4.1	11.1	SW
5	53.9	20.2	27.4	14.9	83	14.5	3.1	5.2	S
6	57.0	17.1	20.5	14.2	95	13.8	3.1	5.1	S
7	58.5	14.0	15.5	12.7	90	10.7	3.2	5.8	SE
8	61.2	14.4	16.4	10.6	90	10.9	3.7	6.7	SSW
9	64.2	15.3	18.0	12.5	92	11.9	4.5	7.5	SSW, SW
10	55.4	14.8	18.1	8.3	91	11.5	7.7	14.9	SSW
Average	57.8	15.9	69.1	12.3	90	12.2	4.2		
Normal Yr	56.6	16.1	19.6	13.0	88	11.9	2.9		
11	45.8	21.3	27.5	14.7	71	12.9	5.7	10.3	WNW
12	52.4	15.8	19.9	12.3	75	9.8	4.2	7.5	NNW
13	58.6	13.4	17.5	8.0	90	10.2	2.0	3.3	SW
14	60.6	13.4	19.4	7.7	94	10.8	4.0	8.4	S
15	61.8	14.1	17.8	10.9	91	10.9	2.7	6.2	SSE
16	59.6	16.0	21.9	11.1	87	11.7	3.7	6.0	NNE
17	59.5	15.1	17.7	12.9	96	12.2	3.8	9.3	ESE
18	59.1	15.0	15.9	14.5	98	12.5	3.5	5.0	ESE
19	59.9	16.1	17.9	14.2	97	13.2	1.1	3.6	SSE
20	57.5	18.5	21.7	15.2	91	14.4	2.0	5.5	SSW
Average	57.5	15.9	19.7	12.2	89	11.9	3.3		
Normal Yr	57.1	16.1	19.8	12.4	86	11.6	2.8		
21	52.6	18.8	27.3	16.2	92	14.8	2.7	7.1	W
22	56.4	16.8	20.2	12.3	84	12.0	3.9	8.3	SSW
23	57.3	16.1	20.9	10.0	90	12.2	2.2	4.5	S
24	55.3	15.7	19.4	10.7	94	12.6	4.8	13.0	S
25	50.1	17.8	20.4	14.9	95	14.4	4.6	11.3	SSW
26	49.3	17.1	21.1	14.7	73	10.4	5.2	11.0	W
27	58.2	16.9	22.0	12.4	66	9.2	3.7	7.5	NNW
28	61.2	16.1	20.3	10.2	88	12.0	3.2	4.7	S
29	59.0	16.2	20.1	11.0	94	12.9	4.8	11.4	SSW
30	54.0	18.8	22.3	16.5	88	14.3	3.3	7.3	SSW
31	59.6	17.1	23.8	15.3	93	13.5	4.5	7.8	S
Average	55.7	17.0	21.6	9.1	87	12.6	3.9		
Normal Yr	58.7	15.6	19.2	11.9	85	11.2	3.0		
Avg for Mo	57.0	16.3	20.2	12.5	89	12.2	3.8	14.9	
Max									
Normal Yr	57.5	15.9	19.5	12.4	86	11.6	2.9	22.1	
Max									

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Table 13. (Contd)

Avg Cover (0-10)	Hours of Sun- shine	Pre- cipi- tation (mm)	Evapo- ration (from a box) (mm)	Avg Level Temperature (°C)	Min- imum Temper- (°C)	Sea Ground Temperature (°C)	Re- marks
Jordan Method				(Coastal)			
10.0	—	12.2	(1.8)	—	16.9	11.0	18.0
8.8	6.4	0.4	(3.6)	—	19.1	11.0	18.7
8.2	12.6	—	4.2	—	20.1	8.5	19.0
4.6	10.8	—	4.7	—	22.9	11.0	19.9
6.6	9.8	0.0	(5.5)	—	26.2	12.7	18.7
10.0	—	31.0	(0.9)	—	17.7	13.5	18.0
9.8	—	3.3	1.8	—	15.7	11.6	17.7
7.6	5.1	—	3.1	—	18.0	8.1	18.0
3.2	9.3	—	3.9	—	18.8	11.1	18.7
10.0	0.5	0.2	(3.3)	—	15.3	7.0	17.0
7.9	54.4	47.1	3.3	—	19.1	10.6	18.4
7.7	50.8	33.8	3.2	—	19.6	—	—
6.0	12.8	0.0	(6.2)	—	22.4	12.6	17.7
7.6	8.5	4.2	(3.8)	—	17.0	10.6	15.7
7.0	0.1	1.6	(1.5)	—	14.0	4.4	15.1
6.0	12.4	—	3.3	—	17.6	6.2	19.7
9.0	7.8	—	4.0	—	19.9	9.8	17.5
9.4	2.9	8.7	(2.5)	—	16.8	10.3	18.0
10.0	0.1	3.4	(1.9)	—	15.5	11.6	17.3
10.0	—	17.0	(0.1)	—	16.0	13.3	16.3
10.0	0.0	3.2	(2.2)	—	18.3	13.2	16.5
3.8	10.2	(3) 0.1	(3.4)	—	21.2	13.8	19.4
7.9	54.7	38.2	2.9	—	17.9	10.6	17.3
7.4	13.4	34.4	3.2	—	18.9	—	—
6.0	5.8	2.9	(4.4)	—	20.9	15.0	19.1
1.4	12.6	—	4.1	—	19.2	8.5	18.5
3.8	9.6	—	3.6	—	19.4	8.1	20.5
7.2	6.3	(3) 0.1	2.9	—	18.3	8.3	19.0
9.6	5.0	6.5	(3.6)	—	19.5	10.2	18.3
7.4	11.2	1.0	5.3	—	17.6	11.6	16.2
8.6	9.2	—	4.2	—	16.9	5.0	18.0
1.4	12.3	—	3.4	—	19.4	7.5	19.0
6.4	8.6	0.0	(3.1)	—	20.7	8.8	19.8
10.0	—	0.8	(2.5)	—	18.0	14.0	19.9
7.0	6.4	3.7	(3.0)	—	17.7	12.1	16.9
6.3	86.8	15.0	3.6	—	18.9	9.9	18.7
7.1	59.4	40.7	3.1	—	18.0	—	—
Ttl 195.9 Ttl		100.3	3.3	—	18.6	10.3	18.1
Ttl 163.6 Ttl		108.8	3.2	—	18.8	—	—
7.4	% 37	108.8	3.2	—	18.8	—	—

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Table 14. WEATHER TABLES Ambetsu August 1939

Item	Avg.	Temperature (°C)			Avg.	Avg.	Wind	Di-	
		Atmos-	Aver-	Max-	Min-	Humid-	Vapor	Avg	Max-	rec-
Pressure	High	Low	(%)	ity	Ten-	Velo-	imum	tion	
at Sea					sion	city	Velo-		
Level					(mm)	(over-	city		
Date	(mm)	700+				all avg	m/sec		
						m/sec			
1	56.6	18.2	22.8	14.1	77	12.0	1.2	4.5	SE
2	55.9	16.3	19.7	12.8	89	12.2	3.4	6.7	SSW
3	58.3	16.8	20.7	12.6	82	11.7	1.7	3.9	NNW
4	55.2	19.8	25.7	15.8	82	14.0	4.2	9.2	SSW
5	54.7	19.1	24.7	16.8	91	15.0	3.3	5.8	SSW
6	55.9	18.5	22.9	15.8	95	15.0	0.6	1.4	SSW
7	57.1	15.7	18.8	14.2	99	13.1	1.0	2.6	NW
8	60.9	15.6	20.5	13.3	91	12.0	1.4	3.1	SW
9	64.1	15.4	21.0	10.7	84	11.0	1.6	4.3	S
10	53.7	18.3	21.4	13.1	68	12.4	7.7	12.1	SSW
Average	57.2	17.4	21.8	13.9	86	12.6	2.6		
Normal Yr	56.2	16.6	20.0	12.8	87	12.2	2.7		
11	46.0	19.0	23.4	15.6	84	13.8	5.4	11.1	SSW
12	54.0	12.4	17.7	10.7	87	9.3	6.2	10.3	NW,N
13	59.3	13.4	18.4	9.6	90	10.2	1.6	3.9	ESE
14	60.4	14.2	20.0	9.4	82	10.0	1.6	4.3	ESE
15	60.3	16.4	22.4	10.3	68	9.5	1.7	3.2	ESE
16	58.1	21.1	29.2	12.7	59	11.0	2.2	7.1	E
17	58.1	20.9	25.4	17.4	71	12.9	2.7	6.5	ENE
18	57.9	18.2	21.4	16.1	90	13.9	1.2	3.3	NE
19	59.5	16.3	18.6	14.9	97	13.4	1.8	4.3	SSW
20	57.9	17.1	21.5	14.6	95	13.6	2.6	5.5	SSW
Average	57.2	16.9	21.8	13.1	82	11.8	2.7		
Normal Yr	56.9	16.3	19.7	13.0	85	12.0	2.8		
21	52.9	19.0	25.6	15.3	87	14.1	2.9	6.0	SSW
22	56.8	15.6	21.6	11.1	77	10.2	2.0	4.0	NE
23	57.5	16.5	22.0	11.7	68	9.5	2.4	6.2	SW
24	54.8	17.7	22.4	11.4	75	11.4	5.2	10.9	SSW
25	50.3	17.6	20.7	13.7	96	14.2	4.5	7.6	SSW
26	50.6	14.0	16.4	11.8	89	10.7	4.6	8.8	WNW
27	58.7	15.9	20.5	13.2	67	9.2	3.3	5.7	WNW
28	60.9	17.4	20.9	13.9	78	11.4	3.1	5.5	SW
29	57.8	20.5	25.5	15.0	73	13.1	4.9	8.5	SSW
30	54.1	19.3	23.3	17.0	82	13.6	4.6	10.1	SSW
31	60.0	16.8	21.8	13.1	85	12.0	1.8	3.5	N
Average	55.8	17.3	21.9	13.4	80	11.8	3.6		
Normal Yr	58.3	16.1	19.3	12.5	84	11.4	2.8		
Avg for Mo	56.7	17.2	1.8	13.5	82	12.0	3.0	12.1	SSW
Normal Yr	57.2	16.4	19.7	12.8	85	11.8	2.6	14.9	E

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Table 14. (Contd.)

Avg Sky Cover (0-10)	Hours of Sun- shine	Pre- cipi- tation (mm)	Evapo- ration (from a box) (mm)	Avg Snow- fall (cm)	Average Ground Level (Coastal) (mm)	Min- imum Temper- ature (°C)	Re- marks
Jordan Method					atue Temper- ature (°C)	Water- Tempera- ture (°C)	
6.8	7.8	—	5.0	—	20.9	13.2	19.1
9.4	11.9	6.2	(4.3)	—	19.4	11.9	20.0
8.8	11.0	0.2	(4.7)	—	20.8	12.2	18.3 $\oplus \ominus \ominus$
9.0	5.3	1.1	(3.9)	—	21.3	16.0	18.1 $\oplus \ominus \ominus$
9.6	1.1	9.1	(1.4)	—	19.7	15.8	18.0 $\oplus \ominus \ominus$
10.0	2.9	0.4	(2.2)	—	22.2	17.0	19.0 $\ominus \ominus \ominus$
10.0	0.2	1.2	(1.7)	—	18.6	15.7	18.0 $\oplus \ominus \ominus$
7.8	5.8	4.1	3.9	—	19.2	14.6	17.4 $\oplus \ominus$
3.4	11.9	—	5.6	—	20.2	9.2	17.6 $\oplus \oplus$
10.0	—	4.9	(5.3)	—	17.3	11.9	16.8 $\oplus \oplus \oplus$
8.5	47.7	27.2	3.8	—	20.0	13.8	18.2
7.2	56.7	35.4	3.5	—	19.9	—	—
9.6	0.6	2.3	(2.3)	—	19.9	15.9	17.0 $\oplus \oplus \oplus$
9.0	—	3.7	(1.5)	—	14.1	11.0	15.5 $\oplus \oplus \oplus$
7.2	1.7	—	2.2	—	15.6	8.1	16.5 \oplus
0.4	12.3	—	5.0	—	17.7	7.0	16.3 \oplus
0.8	12.1	—	5.7	—	17.8	8.4	17.0 \oplus
9.0	6.9	0.0	6.2	—	23.4	9.6	18.8 \oplus
7.4	5.6	0.4	(1.0)	—	20.9	14.7	18.5 \oplus
10.0	—	6.4	(1.6)	—	18.5	15.5	16.5 \oplus
10.0	—	1.4	(1.1)	—	18.4	16.0	15.9 $\oplus \ominus$
9.2	5.3	0.5	(2.7)	—	19.9	16.2	16.7 $\oplus \oplus \ominus$
7.3	44.3	14.7	2.9	—	18.6	12.2	16.9
7.3	53.1	41.3	3.5	—	19.3	—	—
8.4	4.2	3.5	(3.9)	—	20.1	16.3	17.8 $\oplus \ominus \ominus$
3.6	12.1	0.0	5.0	—	18.2	9.9	19.5 $\oplus \ominus$
5.0	8.6	0.0	4.0	—	17.5	10.4	18.4 $\oplus \oplus$
9.8	4.8	3.5	(4.2)	—	18.4	8.9	17.5 $\oplus \oplus \ominus \ominus$
10.0	—	9.3	(0.7)	—	18.1	15.9	16.6 $\oplus \ominus$
9.2	—	13.1	(3.2)	—	15.1	12.9	18.8 $\oplus \ominus$
8.2	9.5	—	5.2	—	16.5	11.2	19.0 $\oplus \oplus$
6.0	9.9	—	4.7	—	18.1	11.3	19.1 \oplus
9.0	6.1	1.0	(5.1)	—	19.9	13.9	20.1 \oplus
10.0	3.5	3.8	3.9	—	20.2	17.3	19.7 $\oplus \ominus \oplus$
1.8	9.5	—	4.5	—	18.6	12.2	20.1 $\oplus \ominus \oplus$
7.4	68.0	34.2	4.0	—	18.2	12.7	18.8
6.9	61.7	32.0	3.7	—	18.5	—	—
	Ttl 160.0	Ttl 1					
7.7	% 36	76.1	3.6	—	18.9	12.9	18.0
	Ttl 171.3	Ttl 1					
7.1	% 39	108.7	4.2	—	19.2	—	—

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Table 15. LOCAL WEATHER SUMMARY TABLE

Place Name	Item	Temperature (°C)			Rainfall (mm)			1000 Hours			Weather			
		Avg	Avg	Aver-	Max	Date	Max Date	Avg	Pre-	Avg	Sky	Cloudy	Pre-	Avg
		High	Low	Com-	Total Com-	Max Daily	vail-	Cover-	Clear-	Clear-	Snow-	Snow-	Cipi-	Snow-
				pared	Daily	per-	ing	ation	ing	ing	fall	fall	cipi-	ation
				to Avg	to Avg	ature	Wind	er						
				Year		Year								
Odomari	21.6	14.5	18.0	(-)0.6	26.7	31	9.9	15	109.4	(+)16.7	54.3	6	19.3	SSW
Honto	22.0	15.6	18.8	(-)0.8	27.8	6	10.4	14	102.2	(-)11.2	56.7	6	20.0	SSW
Maoka	21.8	15.0	18.4	(-)1.0	27.6	6	10.7	15	104.6	(+)5.8	46.0	6	19.4	SSW
Ochiai	23.3	13.3	18.3	(+)0.9	30.4	5	4.8	15	179.7	(+)72.7	63.4	6	20.5	S
Esutotoru	20.5	14.9	17.7	(+)1.7	25.1	16	10.8	14	108.9	(+)33.1	5	18.9	SSW	
Shikuka	20.2	12.5	19.4	(+)0.4	27.5	11	7.8	14	92.8	(-)16.0	20.8	5	17.9	SSE
Ambetsu	21.8	13.5	17.7	(+)1.5	29.2	16	9.4	14	76.2	(-)32.5	9.8	24	18.2	SSW
Nishinotoro	20.4	15.2	17.7	(+)1.5	27.4	5	11.6	13	54.9	(-)92.0	35.5	25	18.4	E
Kaimajima	22.9	17.2	20.0	(+)2.1	27.5	5	14.5	9	62.9	(-)66.6	40.0	6	20.8	N
Koni	22.7	13.9	18.3	(+)0.6	25.0	22	8.1	19	49.9	(-)73.0	14.9	30	19.5	NW
Konotoro	23.3	14.2	16.7	(+)0.5	27.9	6	3.5	15	69.2	(-)48.9	29.1	6	20.7	W
Tomarii	23.4	13.8	18.6	(+)0.2	28.5	5	8.2	15	27.4	(-)61.1	5.9	16	20.6	S
Kushunai	20.9	13.9	17.4	(+)0.6	26.3	6	9.0	9	52.7	(-)54.0	11.3	17	18.8	WNW
Chinnai	20.9	14.4	17.7	(+)0.3	23.7	6	9.6	13	52.1	(-)31.6	16.5	10	18.5	NW
Noyoshi	23.4	13.3	18.4	(+)1.5	28.0	16	7.5	16	130.0	(+)43.8	3.0	11	21.4	W
Uryu	23.0	13.9	18.4	(+)0.7	27.5	20	7.9	15	57.6	(-)73.4	36.0	6	20.7	S
Yaman	21.1	14.5	17.8	(+)0.1	25.5	5	8.3	16	102.6	(-)10.8	50.0	26	18.8	S
Tonnai	24.8	15.5	20.2	(+)2.3	30.1	5	11.6	11	145.5	(+)50.2	20.0	1	21.1	S

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Table 15. (Contd)

Kamikiminai	23.1	13.6	18.4	(+)	0.7	29.1	6	5.0	15	106.4	(-)	46.7	58.6	6	20.3	E	6.3	6	7	
Rutaka	22.9	13.8	18.4	(+)	0.6	28.4	21	6.4	15	85.2	(-)	32.4	47.0	6	20.6	W	6.0	6	10	
Toyosakai	24.7	13.3	19.0	(+)	1.2	29.5	5	5.0	28	138.0	(+)	15.5	76.7	6	21.7	W	5.5	9	9	
Osaka	25.0	13.7	19.3	(+)	1.4	30.8	6	5.0	29	106.9	(+)	13.0	67.8	6	22.0	W	6.0	5	14	
Miho	24.5	12.8	18.7	(+)	0.3	30.3	4	7.4	27	170.7	(+)	27.9	81.7	16	21.2	W	4.6	5	12	
Shiraora	22.4	12.9	17.7	(-)	0.1	32.3	5	8.5	15	107.7	(+)	19.9	55.0	25	19.9	S	6.3	7	12	
Nototomari	21.0	13.6	17.3	0.0	28.4	4	8.8	15	104.8	(-)	12.1	28.0	17	18.7	S	7.2	4	8	16	
Chidori	22.8	14.5	18.7	(+)	1.0	30.6	4	8.7	15	196.7	(-)	23.7	37.2	25	19.2	W	7.1	5	7	13
Noto	18.6	11.8	15.2	(+)	0.2	24.5	28	7.0	14	92.7	(+)	33.3	39.0	5	15.5	S	7.2	4	6	13
Kamishikuka	24.2	11.7	18.0	(+)	0.7	30.1	5	5.2	14	111.1	(+)	10.6	37.0	17	20.5	S	7.1	6	5	15
Kiton	24.2	12.0	18.1	(+)	1.0	28.0	5.14	4.0	14	43.5	(-)	51.2	19.2	16	20.0	S	7.1	6	6	18
Kaibyojima	15.4	11.1	13.3	(+)	0.4	18.9	22	8.7	2.9	55.4	20.0	7	7.6
Toyohara	24.0	13.4	18.7	(+)	0.7	30.5	21	5.5	15	111.9	(+)	6.7	69.0	6	20.4	SE.S	5.5	11	8	9
Konuma	23.9	13.6	18.8	(+)	1.3	28.8	5	6.5	28	149.0	(+)	48.8	78.5	6
Kamiesuturu	22.5	13.4	18.0	26.9	5	5.8	14	84.7	17.3	18	

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Table 15. LOCAL WEATHER SUMMARY TABLE (Contd)

Place Name	Item	Daily Weather							
		Pre- cipi- tation $\geq 0.0\text{mm}$	Pre- cipi- tation $\geq 0.1\text{mm}$	Com- pared to Avg	Snow storms	Thunder- storms	Mist	Gales	Earth- quakes
Odomari	16	9	(-) 3	--	--	14	7	--	
Honto	15	11	(-) 3	--	--	2	--	--	
Maoka	14	14	0	--	--	4	2	--	
Ochiai	17	14	0	--	--	10	3	--	
Esutoru	20	18	--	--	2	6	3	--	
Shikuka	20	18	(+) 3	--	4	9	7	--	
Ambetsu	22	18	(+) 3	--	1	8	5	--	
Nishinotoro	10	9	0	--	--	15	10	--	
Kaimajima	11	11	0	--	--	2	--	--	
Koni	6	6	(-) 9	--	--	--	1	--	
Konotoro	13	12	(+) 1	--	--	2	2	--	
Tomarii	10	10	(-) 1	--	--	1	2	--	
Kushunnai	9	9	(-) 3	--	--	--	--	--	
Chinnai	11	10	(-) 1	--	--	1	--	--	
Noyoshi	18	18	(+) 7	--	1	--	2	--	
Uryu	9	6	(-) 7	--	--	1	4	1	
Yaman	10	10	(-) 1	--	--	2	--	--	
Tonnai	11	11	(+) 2	--	--	2	2	--	
Kamikiminai	13	8	(-) 7	--	--	3	3	--	
Rutaka	10	9	(-) 6	--	1	--	2	--	
Toyosakai	11	10	(-) 3	--	--	--	--	--	
Osaka	12	11	(+) 1	--	--	--	3	--	
Miho	8	8	0	--	--	--	--	--	
Shiraura	14	14	(+) 6	--	1	--	--	--	
Mototomari	10	9	(-) 1	--	--	--	--	--	
Chidori	11	11	0	--	1	--	--	--	
Noto	18	18	(+) 9	--	3	2	--	--	
Kamishikuka	14	12	(-) 4	--	3	--	--	--	
Kiton	7	6	(-) 2	--	1	--	1	--	
Kaibyojima	6	6	--	--	--	21	14	--	
Toyohara	14	13	(-) 5	--	1	5	--	--	
Konuma	13	13	0	--	--	--	--	--	
Kamiesutoru	16	15	--	--	--	--	--	--	

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Table 16. LOCAL WEATHER TABLE

August 1939

Item Place Name Date	Average Daily Temperatures (°C) (1000 hours limit)																
	Nishi- Kaima- notoro	Koni jima	Kono- toro	Kush- unnai	Toma- ri	Chinnai	Nay- oshi	Uryu	Yaman-	Ton- nai	Kami- nai	Ruta- sakai	Toyo- sakai	Osaka	Miho	Shir- aura	Moto- tomari
1	14.7	17.3	16.6	17.6	16.0	16.1	17.4	15.9	15.3	16.7	16.4	16.2	18.3	19.9	15.2	14.5	
2	17.0	18.0	17.8	17.6	17.6	17.8	18.0	19.7	17.3	14.7	20.0	15.8	16.9	17.5	20.9	18.5	10.3
3	17.3	19.3	18.3	18.7	18.3	19.8	18.5	19.4	18.0	18.0	20.9	17.5	18.9	21.3	24.0	19.5	16.3
4	20.0	22.4	18.7	19.9	20.9	19.0	19.3	20.1	18.7	18.9	20.6	19.8	20.1	20.8	23.2	24.5	21.2
5	22.5	23.8	18.0	22.7	24.3	21.8	20.7	20.1	20.3	21.8	24.7	23.6	18.9	22.8	23.0	23.4	24.2
6	20.2	23.3	17.1	22.2	23.0	22.2	21.8	19.0	22.1	15.9	23.7	23.9	16.8	23.8	24.4	19.5	19.4
7	15.3	18.2	19.0	17.7	16.5	15.5	17.6	16.8	17.2	16.5	22.5	15.7	17.1	15.5	18.5	14.0	13.9
8	15.9	17.5	18.9	16.6	16.8	15.8	15.3	16.2	17.3	17.2	20.3	16.6	16.8	18.0	17.1	17.1	14.5
9	16.0	19.0	17.8	16.3	17.6	15.6	16.5	15.9	15.2	17.1	19.4	16.5	16.3	18.3	17.9	16.2	16.0
10	17.4	19.5	15.6	16.3	17.9	16.1	17.9	16.1	17.9	16.4	14.5	21.3	15.8	18.8	17.5	16.8	20.7
11	18.7	22.0	17.6	21.3	20.7	16.0	19.3	21.0	18.9	18.7	18.6	21.0	21.6	22.3	22.7	17.7	17.0
12	17.7	19.0	18.4	17.4	19.3	15.0	16.1	18.7	21.8	20.5	20.7	19.6	21.6	21.0	17.3	18.8	19.0
13	15.7	18.3	16.5	15.6	16.7	15.0	14.4	17.1	17.0	14.6	19.0	16.1	16.0	21.3	16.4	19.3	17.2
14	16.1	18.5	18.8	16.4	18.1	16.1	15.0	17.0	15.5	15.7	16.9	16.0	16.5	22.0	21.8	18.6	17.7
15	15.1	18.0	18.0	14.7	17.4	17.0	17.2	16.9	14.1	13.1	19.4	12.1	14.0	16.5	21.3	14.6	12.6
16	15.4	16.5	16.5	17.8	16.4	16.0	17.8	17.8	14.9	13.6	18.8	14.8	15.4	15.4	15.5	15.3	14.4
17	15.8	17.8	20.	19.4	17.1	15.5	17.2	17.0	17.6	17.6	18.3	15.7	16.3	17.8	16.6	15.9	13.6

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Table 16. (Contd.)

	17.6	18.8	20.2	18.3	15.4	15.8	20.7	18.5	17.7	17.4	17.8	17.4	17.0	18.5	15.2	16.7
18	18.3	21.3	15.6	18.6	15.4	15.3	15.7	18.5	21.0	18.5	18.4	19.2	19.6	21.5	18.3	18.6
19	18.3	21.8	16.6	19.5	18.6	17.3	17.5	18.7	22.0	19.0	22.2	20.5	20.3	20.5	20.7	20.3
20																
21	19.3	21.4	16.5	21.7	22.0	18.6	18.9	20.8	22.8	20.3	22.4	22.4	23.4	23.0	23.1	19.4
22	19.7	19.3	19.6	21.6	19.0	18.7	19.4	16.7	20.5	20.7	19.7	19.3	20.4	20.5	21.6	18.6
23	18.8	21.0	20.2	17.9	17.0	15.3	18.6	19.3	19.9	18.5	20.2	18.5	18.7	15.8	20.3	19.8
24	19.0	20.0	20.0	20.4	18.1	18.2	16.1	16.7	16.6	19.0	19.9	18.9	18.1	14.7	20.1	22.6
25	19.5	21.8	19.4	21.6	21.8	19.6	18.8	20.1	19.1	21.3	22.2	22.0	20.2	20.8	19.6	19.7
26	16.7	20.3	19.5	18.3	17.9	18.3	18.3	17.8	18.1	18.8	20.4	17.8	18.9	18.0	17.9	16.7
27	18.0	20.5	19.4	20.4	18.4	18.1	17.7	15.6	17.7	10.1	19.3	20.8	14.3	16.4	16.9	17.9
28	20.0	21.3	19.7	17.1	17.9	18.1	17.3	19.3	16.2	17.4	20.4	16.3	16.5	18.5	17.1	16.8
29	20.0	21.8	16.8	18.7	19.2	17.8	18.9	19.8	18.0	18.4	19.9	17.5	17.8	16.4	18.7	17.7
30	18.5	23.0	19.3	21.0	21.3	19.3	18.5	18.5	21.2	20.2	20.6	20.4	17.3	20.5	16.2	21.4
31	17.5	21.5	16.8	18.6	20.2	19.6	17.9	19.4	21.5	20.1	22.2	21.5	19.1	20.3	20.1	19.6
Monthly Average	17.7	20.0	18.3	18.7	18.6	17.4	17.7	19.4	18.4	17.8	20.2	18.4	18.4	19.0	19.3	18.7

17.7
18.4
19.0
19.3
18.7
17.7
17.3

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Table 16: LOCAL WEATHER TABLE August 1939 (Contd)

Item Place Name	Average Daily Temperatures (°C) (1000 hrs limit)				
	Chidori	Noto	Kami- shikuka	Kiton	Kaibyo- jima
Date					
1	15.1	12.7	17.2	17.0	10.1
2	16.7	14.1	16.5	16.0	11.1
3	22.0	14.4	17.3	19.5	12.8
4	22.4	14.4	21.1	19.7	12.9
5	23.7	15.8	20.3	21.8	15.4
6	18.0	17.3	14.4	21.0	14.4
7	13.8	12.0	17.4	16.5	11.3
8	14.5	12.7	16.0	16.5	12.9
9	14.8	15.0	19.5	19.3	12.9
10	17.3	17.3	15.8	17.0	12.8
11	21.8	18.0	17.0	20.8	14.9
12	20.7	17.3	17.6	15.0	14.5
13	22.3	12.8	16.7	14.3	12.5
14	18.9	11.9	15.5	16.0	11.2
15	13.2	13.3	18.0	19.0	10.8
16	15.0	12.0	17.1	18.3	11.2
17	14.0	14.6	15.9	18.3	12.3
18	15.8	13.0	15.9	16.5	12.2
19	18.8	17.8	19.4	19.3	13.7
20	22.0	16.8	21.0	21.5	13.9
21	22.8	18.6	22.3	21.3	14.5
22	22.5	13.5	20.1	17.5	15.2
23	18.3	15.8	18.6	17.8	14.6
24	17.8	16.4	15.8	14.0	13.2
25	19.2	16.5	21.7	18.5	14.5
26	19.8	16.3	17.6	17.0	14.2
27	18.4	17.3	18.3	17.5	13.8
28	21.1	17.5	17.9	17.3	14.7
29	17.9	14.1	18.6	18.8	14.3
30	18.4	16.8	17.6	19.5	13.8
31	21.7	15.7	20.2	18.8	14.6
Monthly Average	18.7	15.2	18.0	18.1	13.3

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Table 17. LOCAL WEATHER TABLE August 1959

Item Place Name Date	Nishi- notoro	Kaima- jima	Kono- tora	Toma- ri	Kush- unnai	Chinmai	May- oshi	Uryu	Yaman-	Toyo-	Rute-	Kami-	Ion-	nai	kiminai	ka	sakai	aura	Shirr-	Moto-	tomari	
Daily High Temperatures (°C)	(1000 hours' limit)																					
1	16.3	19.5	20.2	21.7	20.7	19.5	18.7	20.8	18.5	17.5	18.5	20.4	20.1	21.8	24.0	27.3	19.3	16.4				
2	21.2	21.0	21.5	23.0	21.5	22.0	20.0	21.1	21.5	18.2	28.0	21.7	22.6	24.2	26.4	22.2	21.0	19.4				
3	21.4	23.0	21.6	23.6	23.1	24.0	22.0	23.8	23.7	23.5	25.7	22.3	24.6	27.5	29.3	26.2	21.6	18.1				
4	24.8	26.7	21.9	25.5	26.6	22.5	22.5	25.5	22.4	23.0	27.3	26.1	25.6	28.0	29.9	30.3	30.4	28.4				
5	27.4	27.5	21.4	27.2	28.5	25.0	23.2	25.7	24.5	25.5	30.1	28.9	26.4	29.5	29.7	32.3	32.3	23.6				
6	22.1	26.5	20.9	27.9	26.0	26.3	23.7	20.0	25.6	16.7	26.5	29.1	21.1	29.0	30.8	26.7	21.2	16.8				
7	16.2	20.0	22.0	21.0	18.7	17.0	19.2	18.1	20.2	18.0	26.1	17.9	20.6	21.5	23.6	16.3	16.5		14.4			
8	17.5	20.0	21.9	21.0	22.0	19.0	19.3	19.0	21.0	19.6	26.5	20.7	20.6	27.5	23.5	23.0	18.3		15.7			
9	18.4	23.5	21.5	20.5	24.3	20.5	20.9	21.2	20.2	19.7	24.5	22.2	20.0	24.5	24.1	23.3	19.8		19.1			
10	20.4	24.0	22.0	23.5	24.5	20.2	24.1	23.8	19.0	24.7	22.9	24.7	25.4	26.0	23.1	23.6	15.4		21.7			
11	20.5	24.0	24.0	23.9	24.3	21.0	22.3	24.6	25.9	21.6	25.5	25.7	26.6	26.0	25.6	25.1	23.7		25.8			
12	20.8	19.5	21.8	22.9	23.5	19.0	18.8	24.6	26.7	23.8	23.8	25.6	26.6	24.0	22.7	26.2	23.0		21.1			
13	19.8	21.5	22.3	22.1	21.2	19.5	19.1	25.7	22.3	20.0	23.6	22.9	21.1	24.5	23.8	25.9	23.4		22.9			
14	19.8	22.0	23.5	24.2	26.5	22.5	20.2	24.9	21.0	20.5	21.0	22.3	22.0	25.5	26.1	26.5	20.5		23.3			
15	17.1	21.5	23.0	25.9	26.5	21.5	23.5	25.3	20.3	16.5	24.0	29.1	21.6	25.0	25.4	16.2	17.1		16.3			
16	17.0	18.0	22.9	22.4	20.6	20.0	21.5	28.0	17.3	18.8	21.7	17.8	18.4	19.0	18.7	18.2	15.3		16.3			
17	17.0	19.0	23.7	24.1	21.0	17.5	20.1	25.4	20.7	19.5	19.8	17.9	18.6	19.5	18.9	17.8	15.6		15.3			
18	20.2	21.0	23.4	19.4	20.0	18.0	20.0	25.4	21.2	20.0	21.0	19.8	20.6	20.0	19.8	21.3	18.2		19.4			
19	22.2	24.5	23.0	23.0	22.0	17.5	17.8	21.4	26.0	22.1	24.0	22.1	23.1	26.0	22.5	23.0	23.7		22.3			

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Table 17. (Contd)

20	21.0	24.5	23.6	21.1	25.0	19.0	20.0	.22.4	27.5	21.5	26.5	25.3	26.5	27.5	26.4	27.3	25.5	24.9
21	21.0	23.0	23.0	24.2	27.0	21.0	20.7	25.5	27.2	23.0	27.0	26.3	28.4	28.0	27.8	24.4	23.7	25.2
22	21.0	21.0	25.0	24.6	21.5	21.0	23.0	21.2	21.7	23.4	24.0	22.5	23.3	25.0	26.4	25.0	23.1	20.6
23	22.0	23.5	24.9	22.0	21.7	19.5	20.6	22.8	23.8	21.0	25.5	23.3	21.2	21.5	24.9	26.4	24.3	21.7
24	21.0	23.5	23.5	23.9	24.9	25.0	22.3	20.7	23.1	21.2	21.7	25.0	24.0	23.3	21.5	26.8	26.3	24.9
25	22.0	23.5	23.5	22.7	23.4	24.7	21.5	20.2	22.5	21.4	24.0	25.0	25.7	23.7	27.0	24.6	26.4	21.1
26	19.3	23.5	23.5	21.0	20.5	21.0	20.4	21.0	21.5	20.0	23.5	20.2	22.5	20.5	20.6	20.2	23.0	20.8
27	22.3	25.0	22.9	22.9	22.6	20.7	20.4	21.2	25.5	21.4	24.8	23.4	22.5	25.6	26.4	25.1	22.6	
28	22.0	25.5	23.9	23.5	23.8	23.2	20.5	26.5	23.3	24.0	26.5	26.1	22.7	27.5	27.8	27.2	24.6	21.2
29	21.0	25.0	22.8	27.2	25.1	23.0	22.2	22.8	27.0	24.4	24.4	26.5	25.3	24.1	27.0	27.8	26.9	23.5
30	20.5	24.5	22.2	23.4	20.0	23.4	22.2	23.3	25.0	25.1	22.8	26.5	23.0	23.6	24.0	23.1	26.7	23.6
31	19.5	24.5	22.0	23.4	24.3	22.7	22.2	23.2	23.2	26.2	22.1	26.0	26.6	21.6	25.5	24.8	27.4	21.6

Monthly Average

20.4	22.9	22.7	23.3	23.4	20.9	20.9	23.4	23.0	21.1	24.8	23.1	22.9	24.7	25.0	24.5	22.4	21.0
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Table 17. LOCAL WEATHER TABLE August 1939 (Contd)

Item Place Name	Daily High Temperatures (°C)				(1000 hrs limit)
	Chidori	Noto	Kami- shikuka	Kiton	
Date					
1	17.6	15.5	22.4	21.5	11.4
2	20.0	18.2	23.0	23.0	13.5
3	29.4	18.6	22.6	25.5	15.4
4	30.6	18.1	29.0	25.9	15.1
5	29.7	21.5	30.1	28.0	17.4
6	19.2	21.1	18.0	23.0	17.3
7	14.9	14.0	22.0	20.0	11.9
8	16.9	16.7	21.0	20.5	16.1
9	18.6	18.0	29.5	27.0	17.1
10	23.4	22.3	25.0	22.5	14.9
11	27.6	21.5	22.0	27.5	16.5
12	24.7	21.0	19.6	23.0	17.4
13	25.5	15.0	24.7	23.0	14.1
14	19.2	16.7	25.7	28.0	13.5
15	17.7	15.9	25.5	27.0	12.6
16	17.8	16.0	24.8	26.5	11.8
17	15.2	17.2	18.7	22.0	13.8
18	18.5	15.0	17.2	18.0	13.3
19	24.0	21.0	24.5	25.0	16.1
20	26.5	19.0	26.8	27.5	16.1
21	26.5	21.0	27.7	26.5	16.7
22	29.0	19.7	26.0	24.0	18.9
23	24.5	18.0	26.2	27.0	17.5
24	24.0	18.7	25.0	22.5	15.4
25	22.3	18.0	27.1	24.5	15.6
26	23.6	17.5	20.4	19.5	15.8
27	22.4	19.6	24.1	22.5	15.7
28	23.2	24.5	25.8	27.0	17.3
29	23.5	17.1	26.7	25.0	16.5
30	25.2	19.4	25.0	23.0	14.9
31	24.8	19.8	25.0	24.5	17.0
Monthly Average	22.8	18.6	24.2	24.2	15.4

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Table 18. LOCAL WEATHER TABLE August 1939

Item Place Name	Date	Daily Low Temperatures (°C)										(1000 hours limit)			
		Nishi- otoro	Kaima- jima	Koni- tora	Kono- tora	Kush- unna	Kush- unna	Chinnai	Uryu	Yaman-	Ton-	Kami- nai	Rute-	Osara kih.	Shir-
		shi	nai	nai	shi	nai	nai	nai	nai	nai	ka	sakai	ka	shira	Moto-
1	13.0	15.0	12.9	13.5	12.5	12.5	13.4	14.0	13.2	13.0	12.0	13.0	12.7	10.5	12.6
2	12.8	15.0	14.0	12.1	13.7	13.5	16.0	18.3	13.0	11.2	11.9	9.8	11.1	10.7	15.4
3	13.2	15.5	15.0	13.8	13.4	15.5	15.0	15.0	12.2	12.5	16.0	12.7	13.2	15.0	18.6
4	15.2	18.0	15.4	14.2	15.1	15.5	16.0	14.7	15.0	14.8	13.8	13.5	14.5	16.4	18.7
5	17.6	20.0	14.5	18.1	20.0	18.5	18.3	14.5	16.0	18.0	19.3	18.2	11.3	16.5	17.0
6	18.3	20.0	13.2	16.4	20.0	18.0	19.8	18.0	18.5	15.0	20.8	18.6	12.5	18.5	18.0
7	14.3	16.3	16.0	14.4	14.2	14.0	16.0	15.5	14.1	15.0	18.8	13.4	13.5	9.5	13.3
8	14.2	15.0	15.9	12.1	11.5	12.5	11.3	13.2	13.6	14.8	14.1	12.5	13.0	8.5	10.6
9	13.6	14.5	14.0	12.1	10.9	9.0	12.0	10.6	10.2	14.5	14.3	10.8	12.6	12.5	11.6
10	14.3	15.0	9.1	9.1	11.2	...	11.9	11.7	9.0	10.0	17.8	8.7	12.1	11.0	11.6
11	16.7	20.0	11.1	18.6	17.1	11.0	16.2	17.4	11.9	15.7	11.6	16.3	16.5	18.5	19.7
12	14.5	18.5	15.0	11.9	15.1	11.0	13.3	12.7	16.8	17.2	18.3	13.5	16.5	18.0	11.9
13	11.6	15.0	10.6	9.1	12.2	10.5	9.6	8.5	11.6	9.2	14.3	9.3	10.9	18.0	9.0
14	12.4	15.0	14.0	8.5	9.7	9.6	9.7	9.1	10.0	10.8	12.8	9.7	10.9	18.5	17.4
15	13.1	14.5	12.9	3.5	8.2	12.5	10.8	8.4	7.9	9.6	14.7	5.0	6.4	8.0	17.1
16	13.7	15.0	10.1	13.1	12.2	13.2	14.0	7.5	12.5	8.3	15.8	11.8	12.3	11.7	12.3
17	14.5	16.5	16.5	14.6	13.2	13.5	14.2	8.5	14.5	15.7	16.8	13.5	13.9	16.0	14.2

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Approved
18. (Contd.)

Approved For Release 2006/01/10 : CIA-RDP78-03109A000500010019-4

0	16.5	16.9	17.1	10.7	13.5	15.5	16.0	15.7	15.3	13.8	15.7	15.0	14.8	14.1	15.7	12.2	14.0
.4	18.0	8.1	16.1	8.7	13.0	13.5	15.6	16.0	14.9	12.8	16.2	16.0	17.0	14.0	17.1	13.5	14.8
.5	19.0	9.6	17.9	12.2	15.5	15.0	15.0	16.5	16.4	17.8	15.7	14.1	13.5	15.0	12.2	15.0	16.2
.5	19.8	9.9	19.1	17.0	16.2	17.0	16.0	18.3	17.6	17.8	18.4	18.3	18.0	18.3	15.3	15.1	17.2
.3	17.5	14.2	18.6	16.4	16.3	15.8	12.2	19.2	18.0	15.3	16.0	17.4	16.0	16.7	11.0	14.0	15.9
.5	18.5	15.4	13.7	12.3	11.0	16.5	15.8	16.0	16.0	14.8	13.7	16.1	10.0	15.7	13.1	11.0	12.0
.0	16.5	16.1	15.9	11.2	14.0	11.5	10.2	12.0	16.2	14.8	13.8	12.8	7.9	13.3	18.8	10.9	12.5
.9	20.0	16.0	19.7	18.8	17.7	17.3	17.7	16.7	18.5	19.3	18.2	16.7	14.5	14.6	13.2	15.0	18.0
.0	17.0	15.5	15.5	15.2	15.5	16.3	14.6	14.7	17.5	17.3	15.3	15.3	15.5	15.2	13.1	12.7	13.7
.7	16.0	15.8	17.9	14.2	15.5	15.0	10.0	9.9	16.7	15.8	18.2	10.4	6.0	7.2	7.4	13.3	13.2
.9	17.0	15.5	10.6	11.9	13.0	14.0	20.0	9.0	10.7	14.3	6.5	...	5.0	5.1	9.8	9.5	12.4
.0	18.0	14.8	10.1	13.2	12.5	15.0	22.5	11.5	12.4	13.2	9.6	...	8.5	5.0	10.5	11.8	12.9
.5	21.4	16.4	19.7	19.1	18.5	13.7	22.0	17.2	17.5	14.6	17.7	10.9	17.0	9.3	16.0	17.2	12.8
.5	18.5	15.5	14.1	16.1	13.6	15.6	16.7	18.0	18.3	16.3	16.6	15.0	15.3	11.0	17.5	17.0	13.6

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Table 18. LOCAL WEATHER TABLE August 1939 (Contd)

Item Place Name	Chidori	Noto	Kami- shikuka	Kiton	Kaibyo- jima
Date	Daily Low Temperatures ($^{\circ}$ C) (1000 hrs limit)				
1	12.5	9.8	12.0	12.5	8.8
2	13.4	10.0	10.0	9.0	8.7
3	14.5	9.8	12.0	13.5	10.1
4	14.2	10.7	13.1	13.5	10.6
5	17.6	10.1	10.5	15.5	13.4
6	16.7	13.5	10.7	19.0	11.5
7	12.7	10.0	12.7	13.0	10.6
8	12.0	8.7	11.0	12.5	9.7
9	11.0	12.0	9.5	11.5	8.7
10	11.2	12.2	6.5	11.5	10.7
11	15.9	14.4	12.5	14.0	13.3
12	16.7	13.5	15.5	7.0	11.6
13	19.0	10.6	8.6	5.5	10.9
14	18.5	7.0	5.2	4.0	8.9
15	8.7	10.6	10.4	11.0	9.0
16	12.1	8.0	9.4	10.0	10.6
17	12.7	12.0	13.0	14.5	10.7
18	13.1	11.0	14.6	15.0	11.1
19	13.5	14.5	14.2	13.5	11.3
20	17.5	14.5	15.2	15.5	11.7
21	19.0	16.1	16.8	16.0	12.2
22	16.0	7.3	14.1	11.0	11.4
23	12.0	13.6	10.9	8.5	11.7
24	11.5	14.0	6.5	5.5	11.0
25	17.0	14.9	16.3	12.5	13.3
26	15.9	15.0	14.8	14.5	12.6
27	14.4	25.0	12.5	12.5	11.8
28	18.9	10.5	9.9	7.5	12.1
29	12.3	11.0	10.5	12.5	12.0
30	11.5	14.1	20.2	16.0	12.6
31	18.5	11.5	15.3	13.0	12.2
Monthly Average	14.5	11.8	11.7	12.0	11.1

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Table 19. LOCAL WEATHER TABLE

August 1939

Item Place Name Date	Oda- mari	Honto	Maoaka	Ochiai	Esutori	Chikuka	Ambetsu	Nishi-	Kaima-	Kono-	Tomari	Kush-	Chin-	Nay-	Uryu Yaman-
								notoro	jima	toro	nai	unnai	nai	oshi	
1	0.0	1.0	9.4	6.6	0.5	5.4	—	—	2.2	—	0.6	2.8	5.6	2.4	0.8
2	—	—	—	—	0.6	0.4	6.4	—	1.0	—	—	—	—	6.1	—
3	—	—	—	—	—	—	0.9	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	1.2	—	—	—	—	—	—	17.4	0.0
5	—	—	—	—	0.0	33.1	20.8	8.4	—	—	—	—	—	—	18.7
6	54.3	56.7	46.0	63.4	18.6	12.8	0.3	2.4	40.0	—	29.1	—	—	0.7	4.7
7	0.0	0.0	—	8.4	0.3	—	5.1	0.4	0.2	—	—	—	—	4.0	0.8
8	0.0	0.1	—	—	—	—	—	0.3	0.2	—	—	—	—	—	0.0
9	0.0	—	—	—	—	—	0.0	0.0	—	—	0.0	—	—	—	—
10	0.1	—	4.9	0.2	2.3	0.2	5.5	2.4	—	—	12.0	1.4	—	8.2	16.5
11	—	—	—	—	—	2.8	2.5	3.6	—	—	0.0	—	—	—	23.0
12	0.0	0.0	—	—	—	1.1	2.1	1.8	—	0.5	—	—	—	—	—
13	—	—	—	—	0.0	0.0	1.2	—	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—	—	—	—	0.0	1.1	—	—	—
15	0.0	—	—	—	—	27.9	—	—	—	—	—	—	—	—	—

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Table 19. (contd)

16	4.1	1.5	0.4	47.0	1.6	10.0	0.0	0.2	1.6	—	1.1	5.9	11.0	1.5	1.0	4.0
17	15.9	4.0	2.0	12.8	5.3	11.7	1.2	11.2	—	10.0	3.0	5.6	11.3	6.5	6.5	14.1
18	18.2	25.9	12.3	1.6	12.9	10.4	6.1	1.3	9.1	5.0	11.7	3.6	5.6	14.6	6.7	14.7
19	0.1	0.0	0.2	0.9	0.5	0.3	1.5	—	—	3.0	0.0	0.6	—	2.8	0.8	1.8
20	0.3	0.0	0.3	0.4	0.2	1.6	2.3	—	—	—	2.3	0.2	—	0.8	1.2	—
21	—	—	1.1	1.9	—	0.4	1.6	1.2	—	—	0.3	—	—	—	9.3	0.1
22	—	—	—	—	—	—	—	0.0	—	—	—	—	—	—	—	—
23	0.1	0.3	0.1	—	—	0.0	—	0.0	—	—	—	—	—	—	0.4	—
24	0.3	0.5	0.3	0.2	—	1.5	—	9.8	—	—	—	1.2	0.4	2.4	2.3	0.5
25	15.4	4.1	9.1	9.7	9.6	21.3	7.3	9.1	35.5	—	10.0	1.6	4.0	4.1	0.0	17.7
26	—	—	—	—	—	0.1	0.0	7.0	—	—	—	—	—	—	—	50.0
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29	0.0	5.8	15.4	0.5	5.8	0.8	4.8	—	1.9	7.0	5.3	—	1.3	—	7.1	0.0
30	0.6	1.7	1.7	0.2	0.1	—	—	1.2	5.1	14.9	1.0	2.9	—	3.2	—	1.3
31	—	—	—	—	0.0	—	3.6	—	—	—	—	—	—	—	—	0.6
Total	10.4	102.2	104.6	179.7	108.9	92.8	76.2	54.9	62.9	49.9	69.2	27.4	52.7	52.1	130.0	57.6
																102.6

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Table 19. LOCAL WEATHER TABLE August 1939 (Contd)

Item Place Name Date	Precipitation (mm) (1000 hours)										Kanie- sutoru
	Tonnai	Kanuk-	Rutaka	Toyo-	Osaka	Mino	Shir-	Moto-	Kiton	Kaibyo-	
	imai	sakai	aura	tomari	aura	chikuka	jima	hara	jima	hara	sutoru
1	20.0	—	—	—	0.6	1.1	4.7	8.3	2.3	0.5	—
2	17.5	—	—	—	—	—	—	—	—	—	0.5
3	14.0	—	—	—	—	—	—	—	—	—	—
4	—	—	—	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—	—	—	12.3
6	8.5	58.6	47.0	76.7	67.8	44.2	4.9	—	7.4	7.3	3.4
7	11.0	—	—	0.2	—	2.3	0.9	12.2	12.1	0.1	20.0
8	17.0	0.0	—	—	—	—	—	—	2.1	—	—
9	—	0.5	—	—	—	0.5	—	—	—	—	—
10	—	—	—	0.4	0.3	—	2.7	1.2	7.2	8.0	—
11	—	—	—	—	—	—	—	—	—	—	4.7
12	—	0.0	—	—	—	—	—	—	—	—	—
13	—	—	0.0	—	—	—	—	—	—	—	—
14	12.5	0.0	—	—	—	0.0	19.1	1.5	—	—	—
15	—	—	—	—	—	—	—	—	7.9	—	—

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Table 19. (Contd)

16	13.0	13.9	4.5	10.5	3.9	81.7	14.6	27.0	25.1	9.2	15.9	19.2	7.7	6.8	15.3	—
17	15.5	16.0	21.2	17.3	3.9	3.4	17.2	28.0	26.4	1.5	37.0	—	5.3	16.4	24.5	4.3
18	11.0	11.7	5.5	12.5	1.1	2.2	3.6	2.1	7.2	6.2	8.0	—	0.5	9.9	7.5	17.3
19	5.5	0.6	—	0.4	0.4	—	1.0	—	—	0.6	—	—	—	0.2	0.6	1.6
20	—	—	—	—	0.4	0.3	—	—	—	—	—	—	—	0.2	1.0	0.1
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24	—	—	—	—	1.3	—	—	—	—	—	—	—	—	—	—	—
25	—	—	—	—	2.7	1.5	17.6	8.7	17.8	55.0	16.5	37.2	18.5	8.3	15.8	—
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
29	—	—	—	—	0.0	0.1	3.8	5.5	—	1.5	—	—	1.0	—	—	—
30	—	—	—	—	2.4	0.7	3.5	0.9	—	3.7	—	—	—	—	—	—
31	—	—	—	—	—	—	—	—	—	—	—	4.3	—	—	—	—
Total	145.5	106.4	85.2	138.0	106.9	170.7	167.7	104.8	126.7	92.7	111.1	43.5	55.4	111.9	149.0	84.7

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Table 20. LOCAL WEATHER TABLE

August 1939

(Railroad Office and Central Research Office Surveys)

Place Name	* Toyohara				Avg Pressure (at sea level) (mm) 700+	Temperature (°C) Aver. Low High	Humid- ity (%)	Avg Vapor Ten- sion (mm)	Wind Avg Veloci- city (over- all ave) m/sec	Maxi- mum Veloci- city (mm)	Direr- tion Wind m/sec	Avg Sky Cover (0-10) (mm)	Pre- cipita- tion (from a box) (mm)	Snow (1000 hours) (cm)	Evapo- ration (mm)
Date	1	54.8	13.4	14.8	11.2	90	10.2	4.3	5.5	N.E.	10.0	3.2	1.2	—	—
	2	56.9	16.2	23.0	11.4	89	12.1	2.0	3.6	S.W.	10.0	—	2.0	—	—
	3	58.3	18.3	25.5	13.0	86	13.2	0.9	2.2	N.N.E., W.S.W.	10.0	—	1.9	—	—
	4	57.5	19.6	26.1	13.8	87	15.3	1.6	3.4	S.W.	6.7	—	1.4	—	—
	5	56.0	23.0	29.3	17.8	85	17.9	7.1	3.5	S.W.	3.7	—	1.7	—	—
	6	55.2	20.0	28.0	15.0	94	15.0	2.0	5.3	N.N.E.	10.0	32.1	—	—	—
	7	55.7	14.1	16.5	12.4	91	10.7	3.5	5.2	N.N.E.	10.0	36.9	1.3	—	—
	8	60.5	15.5	21.0	11.8	89	11.5	2.2	4.8	N.N.E.	10.0	—	1.2	—	—
	9	64.3	17.1	23.8	10.6	83	11.5	1.0	2.5	W.S.W.	4.7	—	1.9	—	—
	10	59.1	17.2	19.5	11.3	92	13.2	2.1	3.8	S.S.E., S.E.	9.0	—	1.9	—	—
	11	49.4	21.6	28.0	18.7	76	14.2	2.3	4.0	S.W.	7.7	0.0	3.3	—	—
	12	52.8	19.2	26.0	14.2	75	11.6	1.4	3.1	N	4.3	0.1	(2.5)	—	—
	13	59.1	17.4	25.0	9.2	76	10.4	1.1	2.8	W.W.W.	0.3	—	3.1	—	—

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Table 20. (Contd.)

Railroad Office Survey

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Table 20. LOCAL WEATHER TABLE August 1939 (Contd.)

Place Name	* Konuma					* Kamiesutoru				
	Temperature (°C) (1000-1000 hours)	Humid- ity (1000 hours)	Hours of Sunshine station (Jordan 1000-1000 hours)	Snow (1000 hours)	Temperature (°C) (1000-1000 hours)	Humid- ity (1000 hours)	Hours of Sunshine station (Jordan 1000-1000 hours)	Snow (1000 hours)	Snow (1000 hours)	
Date	Item High Low Aver- age	Age (%)	Method	hours (cm)	High Low Aver- age	Method	hours (mm)	High Low Aver- age	Method	hours (mm)
1	20.5	11.6	16.1	92	3.2	0.5	--	20.6	13.0	16.8
2	23.8	11.6	17.7	76	1.5	--	--	24.2	13.5	18.9
3	24.0	13.4	18.7	81	4.4	--	--	23.2	14.7	19.0
4	26.1	13.2	19.7	80	4.7	--	--	25.3	14.3	19.8
5	28.8	17.8	23.3	87	1.0	--	--	26.9	19.3	23.1
6	28.2	17.9	23.1	73	0.4	78.5	--	23.3	20.5	21.9
7	18.0	12.6	15.3	90	0.0	--	--	18.5	16.1	17.3
8	21.0	11.9	16.5	79	3.0	--	--	19.5	12.5	16.0
9	24.0	10.6	17.3	64	8.4	--	--	22.5	12.0	17.3
10	26.4	10.0	18.2	82	3.1	--	--	21.5	10.0	15.8
11	25.3	16.5	20.9	63	3.3	--	--	25.5	16.8	21.2
12	24.1	16.2	20.2	59	6.2	--	--	16.5	13.2	14.9
13	23.8	13.8	18.7	65	8.9	--	--	20.3	9.8	15.1
14	22.0	10.4	16.2	62	3.5	--	--	24.1	5.8	15.0
15	18.9	10.0	14.5	87	7.7	1.5	--	25.0	7.1	16.1

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Table 20. (Contd.)

16	20.5	11.7	16.1	78	0.5	15.3	—	23.5	9.8	16.7	69		
17	21.5	15.0	18.3	72	0.0	24.5	—	21.8	14.7	18.3	78		
18	20.4	14.7	17.6	93	0.0	7.5	—	20.8	15.2	18.0	85		
19	21.4	16.6	19.0	94	0.0	0.6	—	20.5	15.7	18.1	91		
20	25.8	14.9	20.4	83	4.8	1.0	—	23.2	16.2	19.7	91		
21	28.4	16.9	22.7	74	5.3	—	—	22.0	18.0	20.0	94		
22	24.6	15.7	20.2	76	3.9	—	—	22.2	13.6	17.9	71		
23	24.6	15.4	20.0	80	5.1	0.5	—	24.0	8.8	16.4	66		
24	24.6	14.6	19.6	91	4.0	0.7	—	22.2	8.4	15.3	87		
25	25.7	18.2	22.0	89	7.8	13.0	—	23.8	17.7	20.8	76		
26	20.4	13.8	17.1	82	7.7	—	—	17.0	14.5	15.8	80		
27	24.0	12.6	18.3	97	5.8	—	—	21.4	11.5	16.5	66		
28	26.4	6.5	16.5	81	11.1	—	—	24.8	10.4	17.6	71		
29	26.0	9.6	17.8	73	8.9	3.8	—	25.5	9.7	17.6	67		
30	24.9	12.6	18.8	88	3.1	1.6	—	23.3	19.2	21.3	83		
31	27.4	15.6	21.5	74	7.8	—	—	23.3	13.4	18.4	73		
Monthly Average													
	23.9	13.6	18.8	79.5	%	31	Ttl	149.0	—	22.5	13.4	18.0	76
Avg Yr	22.8	12.2	17.5	74.2	%	30	Ttl	132.8	—

* Central Research Office Survey

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